WHAT IS ORCID?

• An identifier for researchers
• A registry
• A set of standard procedures for connecting researchers to their affiliations and activities
• A committed community building connectors
• An international-scale open research effort
ORCID’s vision is a world where all who participate in research, scholarship, and innovation are uniquely identified and connected to their contributions and affiliations across time, disciplines, and borders.
These connections matter because research progress is based on the communication of ideas – between individuals, and organizations – and research credit and careers are built on the quality and success of those communications.
INTEROPERABILITY

ENTER ONCE
REUSE OFTEN

PUBLISHER
Assert Authorship

CONNECT
COLLECT

RESEARCHER
000-0001-2345-6789

CONNECT
COLLECT

EMPLOYER
Assert Affiliation

CONNECT
COLLECT

FUNDER
Assert Award
ORCID IS OPT-IN

• ORCID is an opt-in system

• Researchers own and control their record

• An ORCID record is portable and travels with its owner throughout their career

http://orcid.org/about/what-is-orcid/principles
THE ORCID COMMUNITY

• Over 3.6 million researchers
• ~700 members from 39 countries, including national consortia in Australia, Belgium, Canada, Denmark, Finland, Germany, Italy, the Netherlands, New Zealand, Taiwan, the UK and 4 regional consortia in the US
• Over 250 integrations in each sector of the research community
PARTICIPATING FUNDERS

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

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)
WHY SHOULD ACS CARE?

• Streamline application process by pulling information from ORCID

• Ensure accurate citation of award (both grant numbers and organization name) by pushing award information into ORCID record

• Enable real-time reporting by using ORCID notification API

• Recognize your reviewers, too!
APPLYING FOR A GRANT
STREAMLINE APPLICATIONS

Collect ORCID iDs during applications

Pull:

• Employment and education affiliations
• Publications, datasets and other works
• Biography
• Previous funding

...from ORCID record
STREAMLINE APPLICATIONS

Charis Eng, MD, PhD

Orcid ID
ORCID.org/0000-0002-3693-5145

Print view

Country
United States

Keywords
Endocrine Cancer, Microbiome, Cancer Family History, Cancer Research, SDHC, Metabolome, SDHD, Cancer Predisposition, Heritable Cancer Syndromes, Breast Cancer, Cancer Metagenomics, SDHA, SDHB, Cowden syndrome, PTEN, Autism Research, Pheochromocytoma, KILLIN, KLLN, Integrative Genomics, Thyroid Cancer, Cancer Susceptibility

Websites
Genomic Medicine Institute

Other IDs
Scopus Author ID: 7201540468

Biography
Charis Eng, MD, PhD, is the founding Chair of the Genomic Medicine Institute at Cleveland Clinic, founding Director of the Institute’s clinical component, the Center for Personalized Genetic Healthcare, and Professor and Vice Chairman of the Department of Genetics and Genome Sciences at Case Western Reserve University School of Medicine. She was honored with the Sondra J. and Stephen R. Hardis Endowed Chair in Cancer Genomic Medicine in 2008 and the American Cancer Society Clinical Research Professorship in 2009. She was elected to the Institute of Medicine of the National Academies of Sciences in 2010.

Dr. Eng has published over 390 peer-reviewed original research papers in high impact journals and has received numerous awards and honors including the Doris Duke Distinguished Clinical Scientist Award, AAAS Fellow, ASCI, AAP. She is currently Editor-In-Chief of Endocrine-Related Cancer.

Education (6)
Employment (10)
Works (507)
Sort

Microbiomic differences in tumor and paired-normal tissue in head and neck squamous cell carcinomas

Genome Medicine
2017-12 | journal-article
DOI: 10.1186/s13073-017-0405-5

Source: Crossref

Characterization of cryptic splicing in germline PTEN intronic variants in Cowden syndrome

Human Mutation
2017-07-17 | journal-article
DOI: 10.1002/humu.23288

Source: Crossref
STREAMLINE APPLICATIONS

• All this information can be imported from the ORCID record with no typing or manual input by the researcher.

• If a limited amount of information is required, researchers can pick from the list, and the API can send selected data.

BENEFITS: No more manual entry means less time taken and fewer mistakes.
REVIEWING A GRANT
GRANT REVIEW WORKFLOW

**Researcher**
- Link their ORCID to own account
- Add ORCID to investigators too

**Funder**
- Embed reviewer’s ORCID in the review and push review acknowledgement
- Receive new review info from funder and add to researchers’ ORCID records

Notified via email
GRANT REVIEW

• Recognising review activities helps other funders to see the full picture of a reviewer’s professional activity.

• It helps researchers to demonstrate their ‘good citizenship’ and professional status.

BENEFITS: Rewarding review service motivates researchers, and aids funder transparency.
REPORTING OUTPUTS AND IMPACTS
The ability to uniquely identify contributors is a deceptively simple concept which, if realised, could enable forms of real-time understanding of scientific research that up to now have been extremely costly (if not impossible).

--Jonathan Kram, Wellcome Trust
ORCID IDS AND OUTCOME REPORTING

• Real time reporting means ACS can see the impact of their investment from the moment it begins to occur

• Researchers spend less time reporting, saving time.

• Data quality is improved by machine-to-machine connections

BENEFITS: Speed, efficiency and quality of data are all improved, for researchers and funders.
REPORTING: AN EXAMPLE WORKFLOW
HOW DOES USING AN ORCID ID MAKE REPORTING EASIER?

We created a new proof of concept demonstration of a tool to match ORCID iDs for grantees to outputs linked to a specific grant.

• This model can be used by any reporting system

• Leverages the high level of ORCID adoption in the publishing industry
A NEW PROOF-OF-CONCEPT

Research reporting: Step 1

A user needs to report outputs associated with a grant, so they log in to the prototype with their ORCID account...
A NEW PROOF-OF-CONCEPT

Research reporting: Step 2

The user grants permissions to the prototype using the ORCID authentication process...
A NEW PROOF-OF-CONCEPT

Research reporting: Step 3

Now the prototype has the iD, it pulls funding information from the record, and the user selects a funding source...

Choose one of your funding sources:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Title</th>
<th>Type</th>
<th>Organization ID</th>
<th>Grant IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome Trust</td>
<td>Demonstration project</td>
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</tr>
<tr>
<td>European Commission</td>
<td>THOR - Technical and Human Infrastructure for Open Research</td>
<td>GRANT</td>
<td>FUNDREF</td>
<td>H2020-EU.1.4.1.3.</td>
</tr>
</tbody>
</table>

If the funding you are looking for is not listed, UberWizard will help you add it quickly and easily.
A NEW PROOF-OF-CONCEPT

Research reporting: Step 4

The prototype searchers for outputs associated with the user’s ORCID iD, and the user selects works from the results to link to funding. Done.
REPORTING
LEVERAGES EXISTING ORCID CONNECTIONS
CONNECTED FUNDING

When funders push successful grant awards to the ORCID registry, it is available for easier funding acknowledgements.
CONNECTED ARTICLES

There are now 5m @webofscience records with associated @ORCID_Org iDs! #ORCID15

Europe PMC Updates
@EuropePMC_news

What a milestone! Over 2 million articles in #EuropePMC now associated with one or more ORCIDs europepmc.org
/search?query=A ...

And @ElsevierConnect have c3m records with links to @ORCID_Org! #ORCID15
Over 3000 journals are collecting ORCID iDs from authors, including requirements by American Chemical Society, American Geophysical Union, eLIFE, EMBO, IEEE, PLOS, Royal Society, Royal Society of Chemistry, Science, and Wiley.

"Over 10,000 authors have used our manuscript submission system since we launched the requirement in January. We have received only one complaint." -- Brooks Hanson, AGU
ORCID AUTO-UPDATE

- Link own ORCID to author profile
- Add ORCID to co-authors too

Embed authors’ ORCID in the metadata when the manuscript is accepted

Check authors’ ORCID in the metadata when assigning DOIs to new publications

Receive new publication info from Crossref and add to authors’ ORCID records

Notified via email
AUTO-UPDATE FOR DATA

Researchers: (1) use ORCID iD when submitting a dataset, and (2) authorize DataCite via profiles to update your ORCID record.

Data centers: (1) collect ORCID identifiers during the submission (2) embed the iD in the published work and include the iD when submitting to DataCite.

DataCite: Upon receipt of data from a data center with a valid identifier, DataCite will automatically push that information to the researcher’s ORCID record.
Hi Josh Brown,

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 (2016-09-26)

**Works (1)**

Open Access in Context: Connecting Authors, Publications and Workflows U... [link](http://dx.doi.org/10.3390/publications4040030)

more info...  Add now

You have received this message because you opted in to receive weekly inbox notifications about your ORCID record. Learn more about how the Inbox works.

You may adjust your email frequency and subscription preferences in your account settings.
AUTO-UPDATE IN ACTION

ORCiD

Crossref has asked for the following access to your ORCID Record

Read items in your ORCID record
Create or update your activities

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.

Sign into ORCID or Register now

Personal Account
Institutional Account

Sign in with your ORCID account

Email or ID *
0000-0002-8689-4935

ORCID Password

Forgotten password?

Deny
Authorize
AUTO-UPDATE IN ACTION

Authorized!

Congratulations, you have given permission for Crossref to add and modify works in your ORCID record.

You can revoke this at any time at https://orcid.org/account
# AUTO-UPDATE IN ACTION

<table>
<thead>
<tr>
<th>Works (33)</th>
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</table>
AUTO-UPDATE IN ACTION

Jake VanderPlas @jakevdp · 2h
My first @JOSS_TheOJ paper passed review and is published! joss.theoij.org/papers/10.2110...

Jake VanderPlas
@jakevdp

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

ORCID

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
• Automatic update of ORCID and any connected system (such as a funder reporting site) means less time doing reporting tasks and more time for research

• Accurate attribution means improved discoverability in publication databases and more reliable citation statistics
CONSORTIUM BENEFITS

Consortia bring special advantages:

• A consistent, planned approach

• Better integration with shared systems – including support from vendors

• Multiple integration points (could be used by publishing or research managers)

• Economies of scale and network effects

• A ready made adopter community – building on HRA
WHAT DOES IT COST?

• Individual non-profit organizations
  • Basic: $4000 (read-write-update)
  • Premium Large: $20,000 (notifications and more API credentials)

• Consortia (groups of 5 or more):
  Pricing depends on size of consortia. For a group of 10-19, the membership cost would be $5,000 per organization – a 75% discount.
SUPPORT

• Consortia benefit from a local support system – arranged by HRA, with Altum.

• ORCID provide documentation and webinars to get you started.

• ORCID provide ‘tier 2’ support, handling all the problems that can’t be managed by the consortium support team (HRA and Altum).
DEVELOPMENT COSTS

Hard to quantify, BUT a study of universities in the UK found that:

• Implementing ORCID took an average of 290 hours of staff time at a total cost of £12.5k ($16k) *N.B. one-off costs*

• Savings of 15 minutes per researcher and 0.1 staff members would recover the initial investment over 5 years

• Ongoing costs were negligible

See the report: http://repository.jisc.ac.uk/6025/2/Jisc-ARMA-ORCID_final_report.pdf
DEVELOPMENT COSTS

For HRA consortium members, Altum will be providing ORCID integration via ProposalCentral, meaning any development costs are shared amongst all participating organizations.

This cost will be folded into a $500 annual support fee.
INTEGRATION PROCESS

*Technically*, integrating ORCID involves adding *<person ID>* and *<source>* fields to data models, mapping to the ORCID API, and implementing OAuth and RESTful calls.

*Socically*, it is critical that researchers are engaged in the process.
INTEGRATION BENEFITS

A robust ORCID integration brings many advantages:

• Improved data quality and reliability
• Less time spent inputting information for researchers
• Less time spent verifying and checking information for administrators
• More transparency and better sharing of data
ORCID AND RESEARCH FUNDING

Understanding the impact of your funding programs is vital to your strategy, program design, and mission alignment. By embedding ORCID iDs in your funding workflows, you can reliably connect your grantees and funding programs -- and save everyone time and reduce errors caused by manual keying of information. Using ORCID in your system(s), you can play your part in building a trusted research information infrastructure by asserting connections between individuals and the grants you award them, by:

- **Collecting** validated ORCID iDs for grantees at the time of grant application or award to create trusted connections
- **Displaying** iDs in your data systems to signal to grantees the value of using ORCID iDs
- **Connecting** these ORCID-grantID-funderID assertions to grantee ORCID records, making it easy for researchers to share this trusted information with other systems and profiles
- **Synchronizing** information to and from your systems and ORCID to improve the post-award reporting experience and support better analysis and evaluation

Learn how more about how to Collect & Connect ORCID iDs in research funding workflows

http://members.orcid.org
Spend more time making contributions and less time managing them

orcid.org/register

Enter Once | Reuse Often