

Connecting Research and Researchers

ORCID: building academic trust

Research Ethics STM Publishing and China Publishing Training day Beijing, 26 August 2015

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> > orcid org



Publishing Ethics

- Multiple dimensions of publishing ethics
 - Data fabrications
 - Honest oversight, or intentional
 - Plagiarism
 - Duplicate submissions
 - Authorship
 - Ghost/guest/gift
 - Review misconduct
 - Citation ethics

Honest oversight

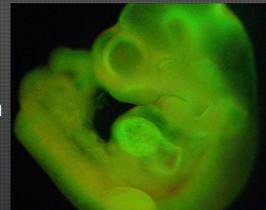
Dear Editor,

In [month] [year], your journal published my colleagues' and my article. Since the publication, we have been working on follow-up analysis using the same database. When new results were implausible, we undertook an intensive investigation... we found we failed to include 8 files of data in the original dataset. This mistake resulted in the under-reporting of xxx... The mistake occurred despite the intensive quality checks. We sincerely apologize for the issues and would like to ask for your cooperation in correcting the published article.

(This letter is fictional)

Intentional? Fabrication & Plagiarism

- Haruko Obokata, Japanese scientist
 - First claimed to have developed a radical and remarkably easy way to make stimulus-triggered acquisition of pluripotency (STAP) cells that could be grown into tissue for use anywhere in the human body



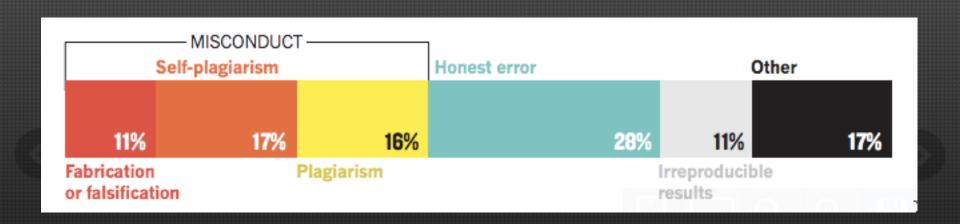
- Published in Nature, January 2013
- Results were unable to replicate
- RIKEN eventually launched an investigation in response to allegations of irregularities in images
- Failing her own replication study, Obokata resigned from RIKEN
- The scandal has become one of the world's most well-known scientific frauds alongside the Shön scandal and Hwang Woo-suk's cloning experiments

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"

Experts pointed out that Obokata possibly copied and pasted passages on stem cells from the U.S. National Institutes of Health website as well as a bibliography from a paper that Taiwanese researchers published in a medical journal in 2010.

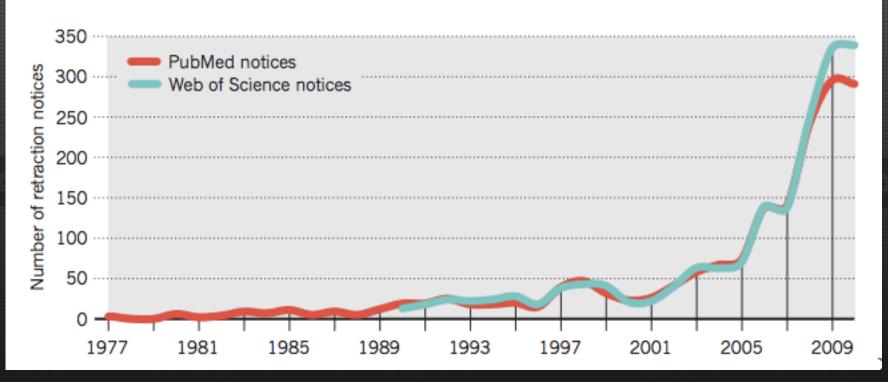
Asahi Newspaper, March 16, 2014



Van Noorden, R. Science publishing: The trouble with retractions. Nature 478, 26-8 (2011).

RISE OF THE RETRACTIONS

In the past decade, the number of retraction notices has shot up 10-fold (top), even as the literature has expanded by only 44%. It is likely that only about half of all retractions are for researcher misconduct (middle). Higher-impact journals have logged more retraction notices over the past decade, but much of the increase during 2006–10 came from lower-impact journals (bottom).



Van Noorden, R. Science publishing: The trouble with retractions. Nature 478, 26–8 (2011).



RETRACTION GUIDELINES

Summary

Journal editors should consider retracting a publication if:

- they have clear evidence that the findings are unreliable, either as a result of misconduct (e.g. data fabrication) or honest error (e.g. miscalculation or experimental error)
- the findings have previously been published elsewhere without proper crossreferencing, permission or justification (i.e. cases of redundant publication)
- it constitutes plagiarism
- it reports unethical research

Journal editors should consider issuing an expression of concern if:

- they receive inconclusive evidence of research or publication misconduct by the authors
- there is evidence that the findings are unreliable but the authors' institution will not investigate the case
- they believe that an investigation into alleged misconduct related to the publication either has not been, or would not be, fair and impartial or conclusive
- an investigation is underway but a judgement will not be available for a considerable time

Journal editors should consider issuing a correction if:

- a small portion of an otherwise reliable publication proves to be misleading (especially because of honest error)
- the author / contributor list is incorrect (i.e. a deserving author has been omitted or somebody who does not meet authorship criteria has been included)

Retractions are not usually appropriate if:

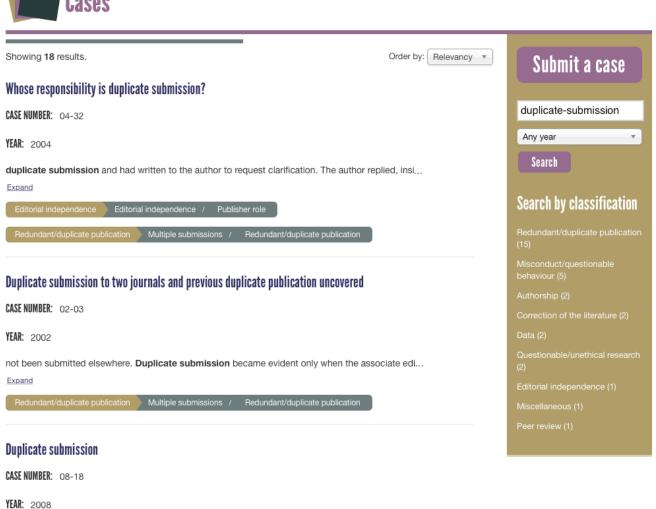
a change of authorship is required but there is no reason to doubt the validity of the findings

- Find out on COPE retraction guidelines:
 - Journal editors should consider retracting a publication if:
 - Journal editors should consider issuing an expression of concern if:
 - Journal editors should consider issuing a correction if:
 - Retractions are not usually appropriate if:

http://publicationethics.org/files/retraction%20guidelines_0.pdf

orcid.org





Contact Us

Expand

journal A, and therefore contacted the editors of journal A about the possibility of duplicate submis...

Duplicate submissions

- The authors submitted a paper to journal A on genetic analysis of a potentially pathogenic organism isolated from children, analyzed by school attended.
- Six days later, the same authors submitted a paper to journal B on genetic analysis of the same organism isolated from children, analyzed by socio-economic class.
- The papers appear to be different analyses of the same data, and substantial portions of the texts of the two manuscripts are identical. No reference is made in either paper to the other submission.
- The instructions for authors for both journals state that "by submitting, corresponding authors confirm that their manuscripts report unpublished work that is not under consideration for publication elsewhere".

http://publicationethics.org/cases/duplicate-submission

Authorship

- An original work was published in our journal in September 2010. The article had five authors.
- In February 2013, the third author is requesting an alteration in his/her name.
- The original name published was SFHS. The request is to change the name to SFH, both on the journal's website and Medline.
- No valid reason could be provided by the author for this change in name. The last name is the cast and now he/she wants to write in future without the cast being evident.
- The Forum noted that this case highlights the importance of schemes like ORCID, which provides a code to uniquely identify academic authors and which authors can sign up to. Then an author's history and online activity can be traced, regardless of what name they use, as all publications are traced back to this unique identifier.
- On a show of hands, the majority (15) of the Forum said they would not change the name and 10 said they would.

http://publicationethics.org/case/change-author's-name-after-publication



Project CRediT

- Project CRediT (Contributor Roles Taxonomy) is led by The Wellcome Trust and Digital Science, facilitated by CASRAI and NISO and supported by the Science Europe Scientific Committee for the Life, Environmental and Geo Sciences.
- The project is developing and maintaining recommendations for a science-oriented contributor role taxonomy and its implementation.



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CRediT Taxonomy

- #I conceptualization #2 methodology #3 software #4 validation #5 formal analysis #6 investigation #7 resources #8 data curation
- #9 writing - original draft #10 writing review & editing **#11** visualization **#12** supervision #13 project administration **#14** funding acquisition

The Peer Review Scum



In 2012, the Elsevier journal Optics & Laser Technology retracted II? papers after an unknown party gained access to an editor's account and assigned papers to fake reviewer accounts.

... to verify reviewers' identities, the system now integrates the Open Researcher and Contributor ID (ORCID) at various points. ORCID identifiers, unique numbers assigned to individual researchers, are designed to track researchers through all of their publications, even if they move institutions.

Ferguson, C., Marcus, A. & Oransky, I. Publishing: the peer-review scam. Nature 515, 480 (2014).

Citation ethics

When to cite?

Garfield, E. Library Quarterly, 66(4): 449-458. 1996.

- Pioneers
- Giving credit to peers
- Methodology, equipment, etc
- Background reading
- Correcting own/ others' work
- Criticizing previous work
- Substantiation

- Alerting forthcoming work
- Providing leads to underrepresented work
- Authenticating data/ fact
- Disclaiming, disputing, ... etc.

Self-citations

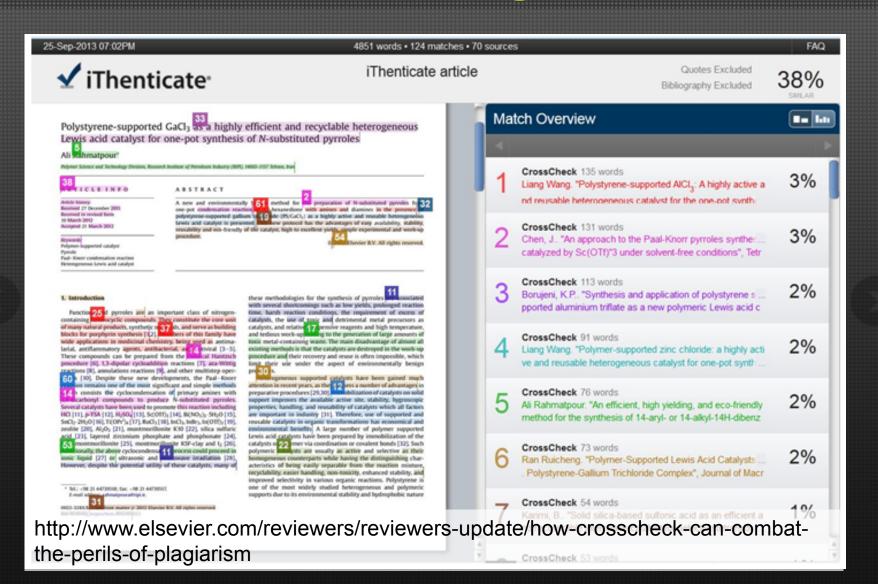
- Excessive self-citation weakens the integrity of the journal
- Journals with excessive self-citations or stacking citations may be deleted from JCR until the problem is corrected
 - List of suppressed journals:
 "Journal Citation Reports Notices."
 Thomson Reuters Corporation.
 http://admin-apps.webofknowledge.com/JCR/
 static httm://notices/notices.htm

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orcid.org

Plagiarism detection





Building trust: persistent identifiers

- Tools to allow for easy addition of identifiers (for people, places, and things) during publishing, grant application, thesis deposit, etc.
- ...and assertion of connection by trusted organization

○RCID ID

□ orcid.org/0000-0001-8472-7079

➤ Employment (I)

IT Sort

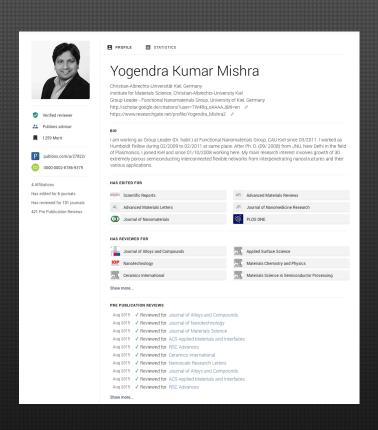
University of Colorado Boulder: Boulder, CO, United States

Source: Faculty Affairs at the University of Colorado Boulder

Created: 2014-07-15



Get credit for peer review



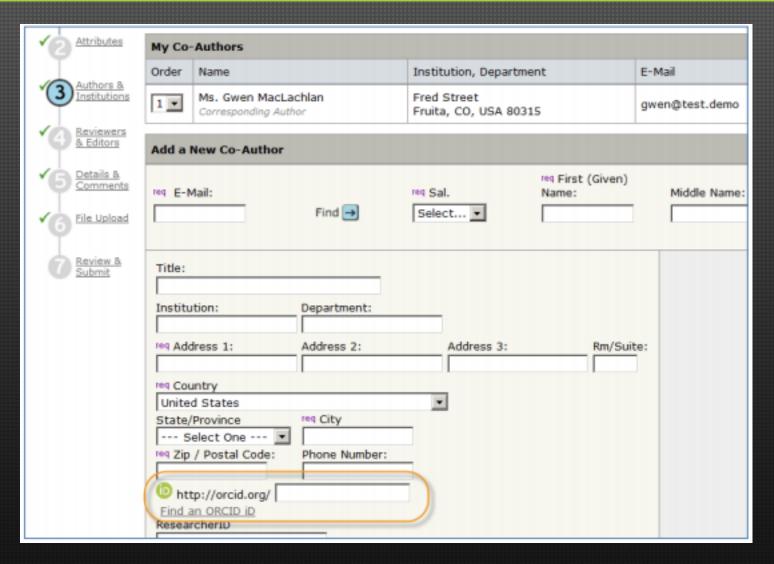
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Publons allows
 authors to register
 their peer review
 contributions, in turn
 display them in their
 profile; sync with
 ORCID



Connecting Research and Researchers

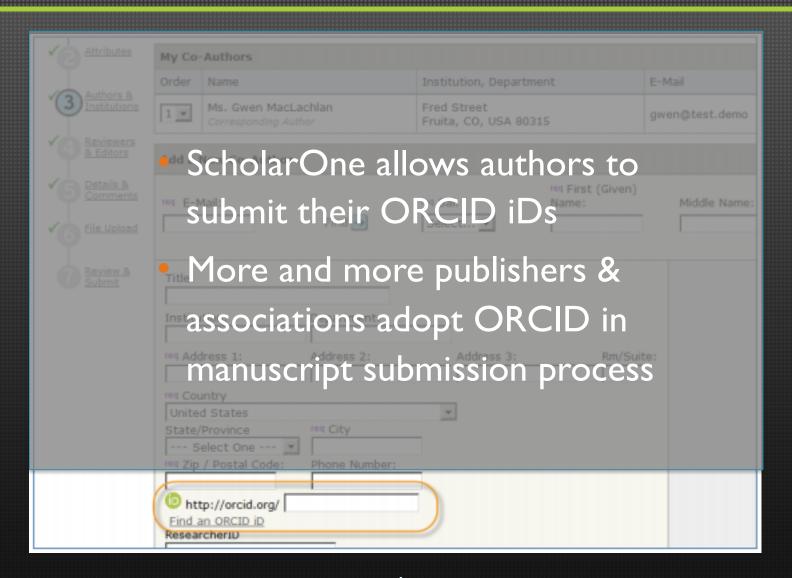
ORCID in submission process





Connecting Research and Researchers

ORCID in submission process





ORCID-enabled systems

Systems with Built-in ORCID Support:

Publishing Platforms

Aries Editorial Manager, eJournal Press, Open Journal Systems, ScholarOne,

Research Information Systems

Elements, Plum Analytics, PURE, SmartSimple, VIVO

Repository Platforms

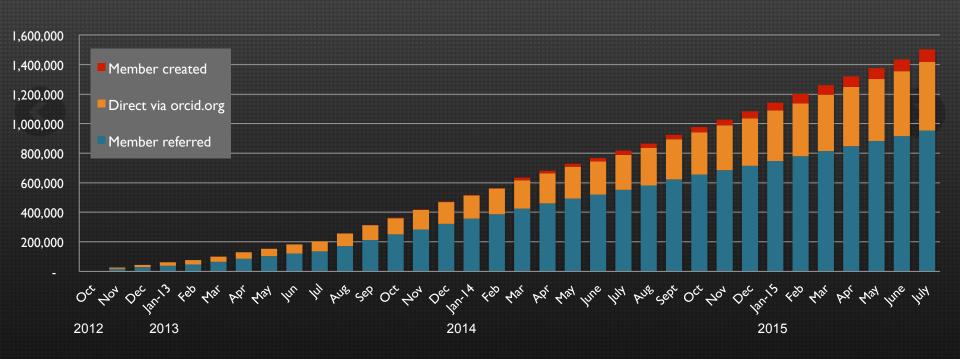
DSpace, Dryad, ePrints



Adoption by researchers

Over 1.5 million researchers have registered for an ORCID identifier.

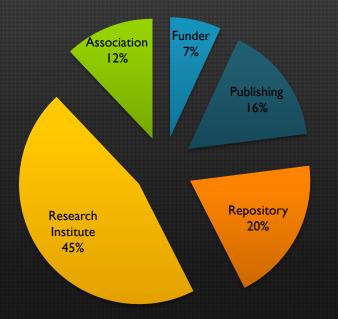
ORCID iDs by creation method

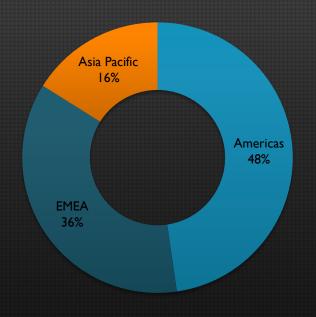




Integration in research systems

Over 280 members and integrations in every region and sector of the international research community.



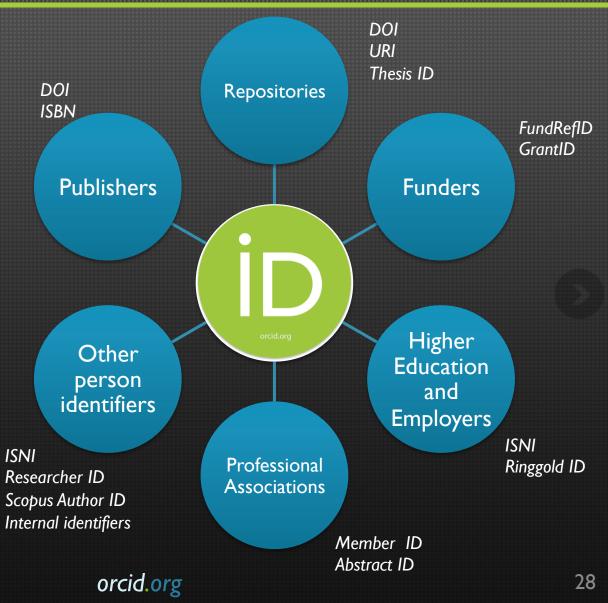




ORCID is a hub

With other identifiers, ORCID enables machine-readable connections with:

- works
- organizations
- person IDs





Connecting Research and Researchers

Coming in 2015:

The author can pre-populate submission form fields: preferred name, affiliation, funding

The authenticated iD becomes a part of the paper

Upon publication, the iD is indexed by CrossRef, Scopus, Web of Science, and other services.

..AND the author's ORCID record is updated with provenance

Information flows through ORCID

Capture, embed, interoperate:

The researcher registers for a free ORCID ID at orcid.org or via an ORCID integration at her institution or funder

Publishers Include ORCID iD in article metadata when they mint a



She includes her ORCID ID when she submits her manuscript to a journal or her dataset to a data centre

DOI with round CrossRef



Data centres Include ORCID ID in dataset metadata when they mint a DataCite DOI

CrossRef and DataCite transmit the new DOI plus the associated metadata to the ORCID registry

Researchers benefit from effortless updates to their personal record and easier re-use of their Information, Institutions get more timely information. Other iDs or metadata could follow this process - the potential is enormous



trip

The researcher's ORCID record is automatically updated with the new metadata and Identifiers

Updates are pushed from the ORCID registry to other systems (CRIS, repositories, grant management systems) on the researcher's behalf

ORCID iDs can be linked to many other IDs and information sources













to linked platforms



Summary

- Research ethics entail multiple dimensions from honest ones to intentional, from simple to complex issues.
- There is an increasing number of cases reported, meanwhile increasing level of efforts to prevent.
 - Standards, tools, guidelines, etc.
- Misconduct, done by individuals or group, can harm reputations; takes time to recover.





Thank you!

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ORCID members in Asia

Existing ORCID members in Asia

Australia 13

New Zealand 3

China 2

Hong Kong 6

Taiwan 5

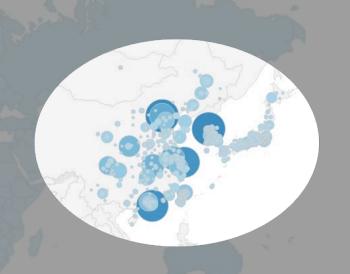
Japan 4

Korea 2

Malaysia, India 1

Consortium discussion taking place for a wider adoption with

better support757,397





ORCID's role

- Create the tools to allow for easy addition of identifiers (for people, places, and things) during publishing, grant application, thesis deposit, etc.
- Engage the community to embed, authenticate, and assert

CELLULAR BASIS OF CIRCADIAN CLOCK IN

SCN: National Institute of Mental Health

1994-10 to present

GRANT NUMBER 5531MH010500-03, GRANT NUMBER: 5F31MH010500-03

Source: UberWizard for ORCID

Data from Figure 7 from: Measurements of Higgs boson production and couplings in diboson final states with the ATLAS detector at the LHC

2013-09 | data-set

DOI: 10.7484/INSPIREHEP.DATA.A78C.HK44

URL: http://dx.doi.org/10.7484/INSPIREHEP.DATA.A78C.HK44

SOURCE: Kyle Cranmer

CREATED: 2013-09-11

Preferred source



Building Trust

ORCID iDs are being embedded in articles

open Biology

rsob.royalsocietypublishing.org

Research





Cite this article: Macqueen DJ, Wilcox AH. 2014 Characterization of the definitive classical calpain family of vertebrates using phylogenetic, evolutionary and expression analyses. *Open Biol.* **4:** 130219.

http://dx.doi.org/10.1098/rsob.130219

Characterization of the definitive classical calpain family of vertebrates using phylogenetic, evolutionary and expression analyses

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Journal List > J Korean Med Sci > v.29(2); Feb 2014

Special Article

6 Open Access

ABSTRACT PUBREAGER POF FIGURES+TABLES REFERENCES

J Korean Med Sci. 2014 Feb;29(2):164-171. English.

Published online Jan 28, 2014. http://dx.doi.org/10.3346/jkms.2014.29.2.164

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Prevention of Venous Thromboembolism, 2nd Edition: Korean Society of Thrombosis and Hemostasis Evidence-Based Clinical Practice Guidelines

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Funding:

Korean Ministry of Health and Welfare NSCR-2012-A102



...and publication search engines

Send Scopus Author details and publication list to ORCID

Your publications on Scopus may be spread over a number of different Author profiles, because these are generated automatically. In order to create a single profile containing the correct publications, please follow the steps in this wizard. On completion, any changes will also be sent as corrections to Scopus.

ResearcherID & ORCID Integration

Accurate attribution has long been a challenge in the scholarly sphere. Whether one is the researcher, funder, publisher or another contributing to this ecosystem, it is critical that work be properly identified and tied to the right individual, institution, publisher or funder. Thomson Reuters has long known this, hence the reason for its ResearcherID solution. And, hence the reason for the company being a founding member of the Open Researcher and Contributor ID (ORCID) initiative.





...and also in theses, personnel records...

uid

mail

givenname

cn

tamuedupersonprimarymembername

83

tamuedupersonofficialname

personaluri

displayname

postaladdress

tamuedupersondepartmentname

telephonenumber

title

tamuedupersonlocalphone

tamuedupersonprimarymajorname

tamuedupersonmajor

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Computer Science

CPSC

G8-Graduate, Doctoral Level

G

http://orcid.org/0000-0001-9108-5190

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uid=f6414350bf4fff62df715039f0d76fe1,ou=people,dc=tamu,dc=edu

Creel, James S





ORCID ID

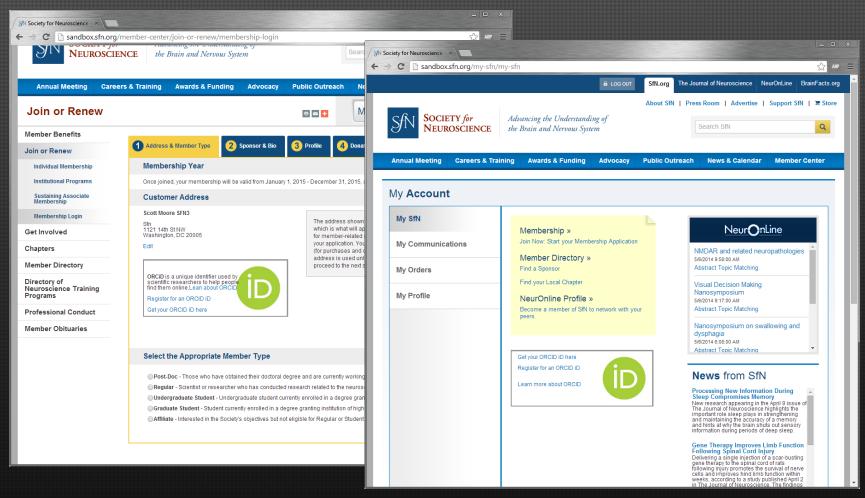


orcid.org/0000-0001-9108-5190

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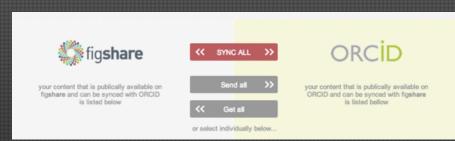


... and association membership systems ...





... and datasets...



Data from Figure 7 from: Measurements of Higgs boson production and couplings in diboson final states with the ATLAS detector at the LHC

2013-09 | data-set

DOI: 10.7484/INSPIREHEP.DATA.A78C.HK44

URL: http://dx.doi.org/10.7484/INSPIREHEP.DATA.A78C.HK44

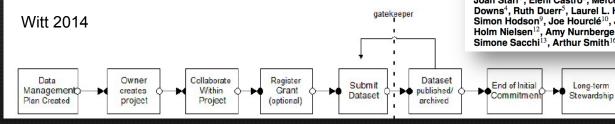
SOURCE: Kyle Cranmer

CREATED: 2013-09-11

✓ Preferred source



...and data management



Achieving human and machine accessibility of cited data in scholarly publications

Joan Starr¹, Eleni Castro², Mercè Crosas², Michel Dumontier³, Robert R. Downs⁴, Ruth Duerr⁵, Laurel L. Haak⁶, Melissa Haendel⁷, Ivan Herman⁸, Simon Hodson⁹, Joe Hourclé¹⁰, John Ernest Kratz¹, Jennifer Lin¹¹, Lars Holm Nielsen¹², Amy Nurnberger¹³, Stefan Proell¹⁴, Andreas Rauber¹⁵, Simone Sacchi¹³. Arthur Smith¹⁶. Mike Taylor¹⁷, and Tim Clark¹⁸

PeerJ 2015



How do I register my ORCID id with the Wellcome Trust?

If you are an existing user of the Wellcome Trusts online application system eGrants, you can verify your existing ORCID id via the 'Your Details' page of your eGrants account.

If you do not have an eGrants account or an ORCID id, you can register for both during the eGrants registration process. Further information can be found in the eGrants User Guide or by contacting eGrants Support.



My NCBI Curriculum Vitae Web Application: SciENcv

Hutcherson L. My NCBI Curriculum Vitae Web Application: SciENcv. NLM Tech Bull. 2013 Sep-Oct;(394):e3.

2013 September 17 [posted]

SciENcv is a new feature in My NCBI that helps users create an online professional profile that can be made public to share with others. In SciENcv users can document their education, employment, research activities, publications, honors, research grants, and other professional contributions. In addition, the SciENcv profile may include an ORCID® iD, when registered with ORCID.

... and grants...



Implementation continuum



Synch integration across organizations

Consortium

Synchronize ORCID Registry with local data

Premium member fee, local DB, IT resources



Connect ORCID to many university systems

Basic or premium member fee, local DB and IT resources

Connect ORCID to one university system

Basic member fee, Member API, requires local DB and IT resources

Capture ORCID using authentication

No fee, Public API, requires local database and IT resources



Researchers register as individuals

No fee, requires internet connection



Online Reputational Management

- Academic institutions and their affiliated members increasingly manage their academic reputation by building eportfolio
- Showcase academic work, grants received, community services

CELLULAR BASIS OF CIRCADIAN CLOCK IN

SCN: National Institute of Mental Health

1994-10 to present

GRANT_NUMBER: 5F31MH010500-03, GRANT_NUMBER: 5F31MH0105

Source: ÜberWizard for ORCID

ORCID record includes, funder name, grant number, source, other provenance



What is ORCID?



ORCID provides persistent machine-readable names (aka digital identifiers) for researchers.



Member-built integrations of ORCID identifiers in key research workflows such as manuscript and grant submission support automated linkages between researchers and their professional activities and affiliations, ensuring that works are appropriately attributed and discoverable



ORCID serves as a hub enabling machine-readable connections between identifiers for organizations, works, and person IDs





Digital scholarly communications require digital (machine readable) information

orcid.org 44