ORCID and the OSTP Guidance on NSPM-33

NCURA Annual meeting, August 8, 2022
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Assistant Vice President, Research Intelligence (Research, Innovation & Impact)  
University of Arizona  
https://orcid.org/0000-0002-1597-8189

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Engagement Manager, Outreach and Partnerships  
ORCID  
https://orcid.org/0000-0002-6103-5034
Disclosure

Lori Schultz joined the ORCID Board of Directors in January 2022
Agenda

For those who are new to ORCID and NSPM-33
1. NSPM-33 overview
2. Quick overview of ORCID
3. ORCID adoption in the US & globally
4. ORCID & NIH/NSF

For those who are ready for more
5. How research organizations benefit from ORCID
6. Next steps...
NSPM-33 Overview
In the News...

FOR IMMEDIATE RELEASE

Tuesday, December 21, 2021

Harvard University Professor Convicted of Making False Statements and Tax Offenses

Dr. Charles Lieber found guilty of concealing his affiliation with the Wuhan University of Technology and his participation in China’s Thousand Talents Program

‘I lost two years of my life’: US scientist falsely accused of hiding ties to China speaks out

Acquitted nanotechnology researcher Anming Hu returns to his lab after two years — and is still grappling with the aftershocks of his ordeal.

U.S. Drops Its Case Against M.I.T. Scientist Accused of Hiding China Links

Gang Chen, a professor of mechanical engineering, was arrested a year ago, accused of concealing his affiliations with Chinese government institutions.
How does foreign influence manifest?

- Violating confidential peer review process
  - both manuscripts and proposal applications
- Taking IP from US and filing patents outside the US
- Appointments/affiliations that duplicate US federal funding/effort (not disclosed)
  - Foreign talent programs
  - Other support that overlaps
Timeline

- Aug 2018: NIH Letters
- May-Sept 2019: JCORE/OSTP Letter
- Dec 2019: 2020 NDAA Signed
- Jan 2021: NSPM-33
- Jan 2022: Implementation Guidance
January 2022 OSTP Implementation Guidance

5 Key Sections

1. Disclosure Requirements and Standardization
   a. Biosketches
   b. Current & Pending Support / Other Support
2. Digital Persistent Identifiers (ie. ORCID)
3. Consequences for Violation of Disclosure Requirements
4. Information Sharing
5. Research Security Programs
National Science and Technology Council (NSTC)

GUIDANCE FOR IMPLEMENTING NATIONAL SECURITY PRESIDENTIAL MEMORANDUM 33

- Adopt digital persistent identifiers to ease reporting & compliance
- Reduce administrative burden
- Disambiguates one researcher from another
- Researcher controls the content in their record/profile
- DPI is free to researchers
- DPI enables interoperability between systems
ORCID Overview
Poll #1
ORCID

Connecting Research and Researchers
A Few ORCID Facts...

- Independent not-for-profit open to participation by all
- Registry launched in 2012
- Sustained by fees from our member organizations
- Guided by our values and founding principles
- Community-governed by a Board of Directors representative of our membership
ORCID, which stands for Open Researcher and Contributor IDentifier, provides three main services

1. The ORCID iD: a unique, persistent identifier free of charge to researchers

2. An ORCID record/digital cv connected to the ORCID iD, that can include employment, education and research output metadata

3. A set of Application Programming Interfaces (APIs), as well as the services and support of communities of practice that enable interoperability between an ORCID record and member organizations
Sofia Maria Hernandez Garcia

Biography

Sofia Maria Hernandez Garcia is used for testing and demonstrating ORCID records.

Activities

- **Employment (2)**
  - **New Arizona State University: Sedona, Arizona, US**
    - 2015-09 to present | Associate Professor (Department of Geography)
    - Source: Sofia Maria Hernandez Garcia
  - **ORCID: Bethesda, Maryland, US**
    - 2014-05-01 to 2019-10-25 | Engagement Lead
    - Source: ORCID via Assert-o-matic

- **Education and qualifications (4)**
  - **London School of Physics: London, GB**
    - 2016 to 2018 | PhD (Computer Science)
    - Source: Sofia Maria Hernandez Garcia
  - **Universidad Politécnica de Madrid: Madrid, Comunidad de Madrid, ES**
    - 2008-09 to 2012-05 | BA Computer Science
    - Source: Sofia Maria Hernandez Garcia
Lori Ann Schultz

Activities

Employment (3)

University of Arizona: Tucson, AZ, US
2020-07-01 to present | Assistant Vice President, Research Intelligence (Research, Innovation & Impact) Employment
Source: Lori Ann Schultz

University of Arizona: Tucson, AZ, US
2014-11-01 to 2020-06-30 | Sr. Director (Research, Innovation & Impact) Employment
Source: Lori Ann Schultz

University of Arizona: Tucson, AZ, US
1994-08-24 to 2014-10-31 | Multiple (Sponsored Projects Services) Employment
Source: Lori Ann Schultz

Education and qualifications (2)

University of Arizona: Tucson, Arizona, US
2009-08-15 to 2011-12-15 | Master of Accounting (Accounting)

Keywords
Competitive Intelligence, Research data analytics, Research administration

Emails
lschultz@email.arizona.edu

Websites & social links
LinkedIn
Name: **Shawna Sadler**

**Biography**
Shawna heads up Outreach & Partnerships at ORCID, building strategic relationships worldwide and exploring new opportunities for adoption and growth. Previously, Shawna was ORCID's Engagement Manager for the Americas continuing the adoption and integration of ORCID in North, Central and South America and the Caribbean. Shawna joined ORCID in 2015 with a long history of connecting researchers to innovative technologies in Canada, Australia and the United States.

**Activities**

<table>
<thead>
<tr>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ORCID: Bethesda, US</strong></td>
</tr>
<tr>
<td>2021-04-31 to present</td>
</tr>
<tr>
<td>Source: ORCID via ORCID Member Portal</td>
</tr>
<tr>
<td><strong>ORCID: Bethesda, US</strong></td>
</tr>
<tr>
<td>2019-05-31 to 2021-03-31</td>
</tr>
<tr>
<td>Source: ORCID via ORCID Member Portal</td>
</tr>
<tr>
<td><strong>Sadler Studio: Calgary, Alberta, CA</strong></td>
</tr>
<tr>
<td>2016-04 to 2019-05</td>
</tr>
<tr>
<td>Source: Shawna Sadler</td>
</tr>
<tr>
<td><strong>Deakin University - Geelong Waterfront: Campus: Geelong, VIC, AU</strong></td>
</tr>
</tbody>
</table>
Researchers can access all their research information via their own unique ORCID profile, to be used wherever they need it.

**Uniquely yours.** Distinguish yourself and claim credit for your work while controlling access to your data, no matter how many people have your same (or similar) name.

**Name flexibility.** ORCID helps reduce the negative consequences of name changes so you will no longer be limited to the name you used when you began your career.

**More time for research.** By allowing trusted organizations to add your research information to your ORCID record, you can spend more time conducting your research and less time managing it!

**Control your visibility and discovery.** ORCID links all your research together, while you control the visibility of each piece of data. Easily see links to your research activities in one place—affiliations, funding, publications, and other contributions.

**Reduced administrative burden.** Experience greater ease as an increasing number of manuscript submission and grant application forms can be auto-populated when you log into their systems with your ORCID. Spend less time re-entering your data!

**Portable profile data.** Easily share the data in your record with an increasing number of funding, publications, data repositories, and other research workflows.
ORCID is broadly used by researchers around the world

There are 10 Million active ORCID users in 246 countries

That’s every country on the planet apart from,
- Niue - island nation in Oceania, pop. 2k
- Norfolk Island - Australian island, South Pacific, pop. 2k
- Saint Pierre and Miquelon - French archipelago south of Newfoundland, pop. 6k
ORCID was built from the ground up to win the broadest possible trust of the communities we serve

- Legal incorporation as US non-profit entity
- Membership organization open to all
- Governed by board elected by our members
- Legally binding membership agreements
- Privacy policy regulated by GDPR and other national regulations
- Legally binding employment agreements, code of conduct, etc

- Founding principles and values
- Commitment to researcher control
- Open source software and FAIR open data
- Equitable, sustainable business model
- Holding ourselves accountable by working openly
- Continuous community engagement and dialog

https://info.orcid.org/orcid-trust/
Researchers are in full control of their ORCID records

- Fine-grained privacy controls let researchers control the visibility of each item in their record
- Data can only be added to the record with researcher’s permission
- Consider writing to the Employment & Education sections

<table>
<thead>
<tr>
<th>Employment (3)</th>
<th>Who can see this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYU School of Medicine: New York, NY, US</td>
<td>Everyone</td>
</tr>
<tr>
<td>2009-07-01 to present</td>
<td>Trusted parties</td>
</tr>
<tr>
<td>Clinical Assistant Professor of Dermatology (Dermatology)</td>
<td>Only me</td>
</tr>
<tr>
<td>Employment Source: New York University</td>
<td>More information on visibility settings</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education and qualifications (1)</th>
<th>Who can see this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Georgia: Athens, GA, US</td>
<td>Everyone</td>
</tr>
<tr>
<td>2021-08 to present</td>
<td>Trusted parties</td>
</tr>
<tr>
<td>Graduate Student Education</td>
<td>Only me</td>
</tr>
<tr>
<td>Source: University of Georgia - Affiliation Manager via ORCID Member Portal</td>
<td>More information on visibility settings</td>
</tr>
</tbody>
</table>
ORCID is increasingly a hub for an immense amount of profile activity with over 4,100 interconnected systems.

- ORCID members updated 2,171,992 records in 2021.
- ORCID helped researchers sign into member systems 48.1M times in 2021.
- 17,043,149 items were added via 501 integrations by 428 members.
- ORCID welcomed 179 new members, including our first from Vietnam, Cameroon, Malaysia, and Jordan.
- 1,892,957 researchers benefitted from members updating records.
- ORCID records are viewed 200 times per minute.
- ORCID data is read 117.5M times per month by external systems, saving users time and reducing administrative burden.
ORCID adoption
There are two ORCID members consortia in the US

**Federal Agencies & Labs**

Organized by the US Department of Energy Office of Scientific and Technical Information

19 members

ORCIDconsortium@osti.gov

**Non-profit organizations (Universities)**

179 members

orcidus@lyrasis.org
Federal Agency Members

1. Centers for Disease Control (CDC)
2. Department of Energy (DOE) OSTI
3. Environmental Protection Agency - EPA
4. Food and Drug Administration (FDA)
5. NASA
6. National Institute of Health (NIH)
7. National Oceanic and Atmospheric Administration (NOAA)
8. USDA
9. USGS
Federal Laboratory members

1. Advanced Photon Source
2. Argonne Leadership Computing Facility
3. Argonne National Laboratory Library
4. Brookhaven National Laboratory
5. Center for Nanoscale Materials
6. Lawrence Berkeley National Laboratory
7. Los Alamos National Laboratory
8. Oak Ridge National Laboratory (ORNL)
9. Pacific Northwest National Laboratory
10. Princeton Plasma Physics Laboratory
179 Member organizations:

- Universities
  - Libraries
  - Research Offices
- Research Institutes
- Research Funders
- Societies & Associations
- Health & Hospital Systems
- Research Groups
ORCID, NIH & NSF

... and other funders
SciENcv - ORCID is already integrated with NIH & NSF

1. Researchers can import data from their ORCID profiles into SciENcv

2. SciENcv maps the ORCID profile fields into the relevant biosketch format

<table>
<thead>
<tr>
<th>ID</th>
<th>NIH Biosketch</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Biography</td>
</tr>
<tr>
<td>2</td>
<td>Employment</td>
</tr>
<tr>
<td>3</td>
<td>Education</td>
</tr>
<tr>
<td>4</td>
<td>Works</td>
</tr>
<tr>
<td>5</td>
<td>Funding</td>
</tr>
</tbody>
</table>

- Personal Statement
- Positions and Honors
- Education/Training
- Citations & Contribution to Science
- Additional Information: Research Support and Scholastic Performance
“Individuals are encouraged to obtain an ORCID ID to facilitate prepopulation of their biographical sketch in SciENcv. Use of an ORCID ID may help reduce the administrative burden associated with preparation of this section of the proposal.”
Requirement for ORCID iDs for Individuals Supported by Research Training, Fellowship, Research Education, and Career Development Awards Beginning in FY 2020

Notice Number: NOT-OD-19-109

Key Dates

Release Date: July 10, 2019
Expected updates...

**NSF SciENcv**
- BioSketch: ORCID to be featured more prominently
- Current & Pending Support: ORCID will be a new feature to populate data in this form

**NIH SciENcv**
- BioSketch: ORCID to be featured more prominently
- Other Support: ORCID will be a new feature to populate data in this form
Many organizations are writing data to ORCID Records

<table>
<thead>
<tr>
<th>Universities</th>
<th>Publishers</th>
<th>Funders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment and Education</td>
<td>Publications and Reviews</td>
<td>Funding and Facility Awards</td>
</tr>
<tr>
<td>University of Georgia</td>
<td>PLOS</td>
<td>Oak Ridge National Laboratory</td>
</tr>
<tr>
<td>University of Florida</td>
<td>Springer Nature</td>
<td>UK Research and Innovation</td>
</tr>
<tr>
<td>Michigan</td>
<td>Mendeley</td>
<td>American Heart Association</td>
</tr>
<tr>
<td>NYU</td>
<td>Scopus</td>
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<tr>
<td>Stanford University</td>
<td></td>
<td>FCT</td>
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<tr>
<td></td>
<td>The BMJ</td>
<td>Fundação para a Ciência e a Tecnologia</td>
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<td></td>
<td>ACS Publications</td>
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Most Trusted. Most Cited. Most Read.
Goal: Accurate & real-time data in ORCID records

Requires: Universities, Funders & Publishers to write data to ORCID records and synchronize with ORCID
How research organizations benefit from ORCID
Goal: Accurate inventory of your researcher’s research activities and funding

Universities around the world are investing in,

- Research Inventory Management Systems (RIMS)
  - RIM is a term commonly used in North America
- Current Research Inventory Systems (CRIS)
  - CRIS is commonly used in Europe and Australia
- Custom solutions
Research Management Systems collect the important data about research happening at your university

1. **People: How many people are conducting research at your university?**
   a. List of the researchers affiliated with your university
   b. Each research has an ORCID iD to disambiguate them from one another

2. **What are they researching?**
   a. List of scholarly output for each researcher

3. **Which Faculty & Department are they affiliated?**
   a. Are they affiliated with any other universities or labs?

4. **Funding: What funding have they received?**
   a. Funder
   b. Amount of funding
### RIM/CRIS Systems that exchange data with ORCID

<table>
<thead>
<tr>
<th>System</th>
<th>Provider</th>
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<tbody>
<tr>
<td>DSpace CRIS (Open Source)</td>
<td>Haplo</td>
</tr>
<tr>
<td>Elements, from Symplectic</td>
<td>infoEd</td>
</tr>
<tr>
<td>Esploro, from ExLibris</td>
<td>Pure, from Elsevier</td>
</tr>
</tbody>
</table>
Example of a ORCID Use in a local RIM system

Marcia Rieke
Professor, Astronomy
Endowed Chair, Dr. Elizabeth Roemer - Steward Observatory
Member of the Graduate Faculty
Astronomer, Steward Observatory
Regents Professor

astro@arizona.edu
520/621-2731

Grant: $451.39M

quantum optics
machine learning
astrophysics
exoplanets
comets
atomic physics
nonlinear optics

cosmology
Name disambiguation. Have confidence that you have correctly identified contributions from your researchers, regardless of the popularity or variability of their names.

Better research connections. Follow your researchers’ careers even after they leave your institution. Keep better track of collaborators and peers at other institutions.

Reduce costs. Reduce the costs required to track the research that comes from your institution by automatically accessing authoritative trusted publication and funding data from your researchers’ ORCID records.

Improved visibility of outputs. Improve the visibility of your researchers’ outputs and ensure they get the recognition they deserve by automatically writing authoritative, trusted affiliation data via integration with the ORCID registry.

Reduced administrative burden. Increase both efficiency and quality in critical processes like assessment exercises. Avoid time spent re-entering data during submission, review, and reporting. When your researchers have more time to spend on research, you save money!

Interconnected infrastructure. The ORCID registry is an open, interconnected hub of profile data. By integrating with ORCID, you can contribute affiliation data and extend the reach of your systems. Sharing data with ORCID can help you to avoid being locked into costly, proprietary systems.

ORCID allows Universities and Research Institutions to stay up to date with the research that comes from their scholars — while making their lives easier.
Member universities can increase the trustworthiness of ORCID records by writing validated data to researcher’s records (with their permission)

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<tr>
<td>Employment</td>
</tr>
<tr>
<td>Source: New York University</td>
</tr>
<tr>
<td>NYU Langone Medical Center: NY, NY, US</td>
</tr>
<tr>
<td>2007-11 to 2012-04</td>
</tr>
<tr>
<td>Employment</td>
</tr>
<tr>
<td>Source: Gladys Vallespir Eillett</td>
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<tr>
<td>Education</td>
</tr>
<tr>
<td>Source: University of Georgia - Affiliation Manager via ORCID Member Portal</td>
</tr>
<tr>
<td>University of Washington: Seattle, WA, US</td>
</tr>
<tr>
<td>2011</td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>Source: Heather Pool</td>
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</tbody>
</table>
ORCID provides a monthly “Member Affiliation Report” to its members.
Many NCURA members are already ORCID members

47.3% of NCURA members work at an ORCID Member Institution

Go to: https://orcid.org/members to see if your organization is a member
Benefits of ORCID

1. Reduced administrative burden
2. Populate data in researcher’s profile for them
3. Connect your system
   a. Enable auto updates
   b. Keep the data in your systems up to date
Watch the University of Florida’s ORCID integration

ORCID at UF:
The University of Florida’s response to NSPM-33

UF Research

Stephanie Gray
Assistant Vice President & Director, Sponsored Programs

Karen Pastos
Project Manager

Jordan Edwards
Database Administrator

https://youtu.be/4UnhXn2LLPU
Learn more about Research Information Management Systems (RIM) from OCLC Research

Rebecca Bryant
Senior Program Officer
OCLC research
Next steps...
Step 1

Get an ORCID iD

orcid.org

Start populating your ORCID record

Everything we’re describing will make more sense
Step 2

- Visit Shawna at ORCID’s table, say hi and get a sticker
- ORCID’s Coffee hour on Tuesday afternoon
- Say hi to Lori and ask about her experience with ORCID at the University of Arizona
Step 3

Talk about NSPM-33 at your university

How will your university meet the new requirements from the NIH & NSF?

Will ORCID be part of this plan?
Step 4

ORCID Membership is required to write data to ORCID records

ORCID US consortium is hosted by Lyrasis

https://orcidus.lyrasis.org

179 Members
Step 5

Write to ORCID records

1. Employment
   a. Position title
   b. Department & Faculty
   c. Start date (end date)

2. Education
   a. Degree
   b. End date
What Universities can do next to prepare for these changes

- Does your university have ORCID membership?
- Which campus systems are connected to ORCID?
- Discuss who is going to write data to the ORCID profiles of your researchers?
- Form a working group to plan