Enhancing and Amplifying Research at NC State University through Open Researcher and Contributor ID (ORCID): A Case Study

NC STATE University Libraries
Mira Waller | Head, Research Engagement | mpark@ncsu.edu
https://orcid.org/0000-0003-3829-1803
Jason Ronallo | Head, Digital Library Initiatives | jnronall@ncsu.edu
https://orcid.org/0000-0002-6080-7549
Questions

How many of you have heard about ORCID and/or know what ORCID is about?
ORCID: The number that every researcher needs

The Open Researcher and Contributor identifier—or ORCID®—is a unique, 16-digit number that:

- Puts the **researcher in control**.
- **Connects** researchers to their research output.
- **Enables** researchers to **carry** their **profile** wherever they go.
- Allows others to **access** and **share** that body of work.
- **Streamlines** publication submission.
- **Eliminates** name **ambiguity**; uniquely identifies you.
- **Works across** different types of outputs, disciplines, and Institutions.
Questions

How many of you have an ORCID iD?
https://orcid.org/0000-0002-2146-9436
Carolyn Mattingly

Over 5 million researchers worldwide have an ORCID iD
Carolyn Mattingly

**ORCID ID**

https://orcid.org/0000-0002-2146-9436

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**Employment (3)**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Location</th>
<th>Role</th>
<th>Date Range</th>
<th>Source</th>
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<tbody>
<tr>
<td>NC State University: Raleigh, NC, US</td>
<td>Raleigh, NC, US</td>
<td>Professor (Biological Sciences)</td>
<td>2019-08-16 to present</td>
<td>Carolyn Mattingly</td>
</tr>
<tr>
<td>NC State University: Raleigh, NC, US</td>
<td>Raleigh, NC, US</td>
<td>Interim Head (Biological Sciences)</td>
<td>2018-02-28 to present</td>
<td>Carolyn Mattingly</td>
</tr>
<tr>
<td>NC State University: Raleigh, NC, US</td>
<td>Raleigh, NC, US</td>
<td>Associate Professor (Biological Sciences)</td>
<td>2012-01-01 to 2019-08-16</td>
<td>Carolyn Mattingly</td>
</tr>
</tbody>
</table>
Recognizing all contributions

• Publications
  • Journal articles
  • Books and book chapters
  • Datasets
  • Theses and dissertations
• Peer review
• Affiliations
  • Employment
  • Education and qualifications
  • Membership and service (editors, review panels, committees, etc)
  • Distinctions and awards
• Research resources
ORCID Profiles: What’s included

- Biography
- Also known as (other names)
- Link to other websites and other identifiers
- Email address
- Employment
- Education and qualifications
- Invited positions and distinctions
- Peer review activity
- Funding history
- Works
ORCID Profiles: Examples of work types

- book
- book-chapter
- book-review
- dictionary-entry
- dissertation
- encyclopedia-entry
- edited-book
- journal-article
- journal-issue
- magazine article
- manual
- online-resource
- newsletter-article
- newspaper-article
- preprint
- report
- research-tool
- supervised-student-publication
- test
- translation
- website
- working-paper
- conference-abstract
- conference-paper
- conference-poster
- disclosure
- license
- patent
- registered-copyright
- trademark
- annotation
- artistic-performance
- data-set
- invention
- lecture-speech
- physical object
- research-technique
- software
- spin-off-company
- standards-and-policy
- technical-standard
- other
Why ORCID?

ORCID Use Cases
How is ORCID different from other researcher profile systems (e.g. Google Scholar)?
ORCID Advantage: Reuse
ORCID's Advantage:

INTEROPERABILITY

RESEARCHER
https://orcid.org/0000-0001-2345-6789

PUBLISHER
Assert authorship

CONNECT
COLLECT

COLLECT
CONNECT

EMPLOYER
Assert affiliation

FUNDER
Assert award

ENTER ONCE
REUSE OFTEN
ORCID By the numbers

- Connections to ORCID records
  - **Works**: 1.3m records (35m works)
  - **Funding**: 150k records (0.5m funding activities)
  - **Peer review**: 26k records (0.5m peer review items)
  - **Affiliations**: 1.9m records (5.3m affiliation items)
ORCID In research workflows

- Profile/RIM/CRIS systems
- Repositories
- Manuscript submission/peer review
- Funding/grant application/research resources
ORCID IN PROFILE/CRIS SYSTEMS

- Assert your researchers’ affiliation with your organization
  - Control how your organization appears in ORCID
  - Your organization is shown as the source of the information
- Enable single sign-on using institutional credentials
  - Your researchers benefit from not having to remember another password
- “Out of the box” solutions
  - MEMBERS: Converis, Digital Measures, Elements, Faculty 180, InfoEd, IRMA, Pure
  - NON MEMBERS: DSpace CRIS, Haplo, VIVO, Worktribe
ORCID and Funding
ORCID and Funding

As of Oct 2019, NIH will require all individuals supported by NIH training grants, fellowships, and career development awards to have ORCID iDs and they must be linked to their eRA Commons profiles.

SciENcv (Science Expert Network Curriculum Vitae)

Biosketches for NIH & NSF
What is SciENcv?

- Science Experts Network Curriculum Vitae (SciENcv) is an electronic system that researchers can use to create and maintain biosketches for NIH and NSF grant applications and annual reports.

- SciENcv pulls information from other systems (MyNCBI, ORCID, and eRA Commons) to allow researchers to quickly create and recreate a biosketch for each grant application or annual report.
How does ORCID relate to SciENcv?

Use ORCID to pull citations into your Biosketch for the “Products” section in your NSF biosketch or the “Personal Statement” and “Contributions to Science” sections of your NIH Biosketch.

ORCID makes it easier to pull in citations to non-traditional publications (white papers, government documents, conference abstracts) or journal articles not in PubMed.

You can also use ORCID to pull information about your education and appointments.
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Journal Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using Best Practices to Extract, Organize, and Reuse Embedded Decision Support Content Knowledge Rules from Mature Clinical Systems</td>
<td>DesAutels S</td>
<td></td>
</tr>
</tbody>
</table>
How do Researchers find each other’s research?
Inefficient Ribosomal Skipping Enables Simultaneous Secretion and Display of Proteins in *Saccharomyces cerevisiae*

Carlos A. Cruz-Teran†, Karthik Tiruthani†, Adam Mischler, and Balaji M. Rao*  
Department of Chemical and Biomolecular Engineering, North Carolina State University, Raleigh, North Carolina 27695, United States

*publication details*

Abstract

![Diagram showing the relationship between promoter, secretion tag, protein, F2A peptide, Aga2, surface display, and secretion]
Balaji Rao

ORCID ID

http://orcid.org/0000-0001-5695-8953

Employment (1)

North Carolina State University Department of Chemical and Biomolecular Engineering: Raleigh, NC
2006-08-16 to present

Employment

Source: Balaji Rao

Preferred source

Works (39 of 39)

An engineered Sso7d variant enables efficient magnetization of yeast cells
ACS combinatorial science
2018 | journal-article

Source: Balaji Rao

Preferred source
A New Statistical Approach to Characterize Chemical-Elicited Behavioral Effects in High-Throughput Studies Using Zebrafish

Guozhu Zhang, Lisa Truong, Robert L. Tanguay, David M. Reif

Published: January 18, 2017  •  https://doi.org/10.1371/journal.pone.0169408

Abstract

Zebrafish have become an important alternative model for characterizing chemical bioactivity, partly due to the efficiency at which systematic, high-dimensional data can be generated. However, these new data present analytical challenges associated with scale and diversity. We developed a novel, robust statistical approach to characterize chemical-elicited effects in behavioral data from high-throughput screening (HTS) of all 1,060 Toxicity Forecaster (ToxCast™) chemicals across 5 concentrations at 120 hours post-fertilization (hpf). Taking advantage of the immense scale of data for a global view, we show that this new approach reduces bias introduced by extreme values yet allows for diverse response patterns that confound the application of traditional statistics. We have also shown...
Affiliations: BioInformatics Research Center, North Carolina State University, Raleigh, North Carolina, United States of America, Department of Biological Sciences, Center for Human Health and the Environment, North Carolina State University, Raleigh, North Carolina, United States of America

http://orcid.org/0000-0001-7815-6767
<table>
<thead>
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<th>Employment (3)</th>
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<tr>
<td><strong>North Carolina State University: Raleigh, NC, US</strong></td>
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<tr>
<td>2013 to present</td>
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<td>Employment</td>
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<td><strong>Source:</strong> David Reif</td>
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<td><strong>Preferred source</strong></td>
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<tr>
<th>Employment (3)</th>
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<tbody>
<tr>
<td><strong>US Environmental Protection Agency: Research Triangle Park, NC, US</strong></td>
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<td>2008 to 2012</td>
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<tr>
<td>Employment</td>
</tr>
<tr>
<td><strong>Source:</strong> David Reif</td>
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<td><strong>US Environmental Protection Agency: Research Triangle Park, NC, US</strong></td>
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<td>2006 to 2008</td>
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<td>Employment</td>
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<tr>
<td><strong>Source:</strong> David Reif</td>
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</tbody>
</table>
Technical Note

Using readability software to enhance the health literacy of equine veterinary clients: An analysis of 17 American Association of Equine Practitioners’ newsletter and website articles

M. K. SHEATS, K. ROYAL, and A. KEDROWICZ

Department of Clinical Sciences, North Carolina State University College of Veterinary Medicine, Raleigh, North Carolina, USA.

*Correspondence email: kdroyal2@ncsu.edu; Received: 09.08.18; Accepted: 12.11.18
ORCID and Publishing

Increase the discoverability of your work.
Increase your impact.
Examples of Journals Requiring ORCID iDs

- Langmuir (ACS)
- Macromolecules (ACS)
- Biotechnology and Bioengineering (Wiley)
- Soft Matter (RSC)
- IEEE journals
ORCID Tip: Auto-Updates

1. Use your ORCID iD when you publish.
2. Publisher pushes your citation with your associated ORCID iD to the Crossref DOI service.
3. Crossref pushes the citation to your ORCID record automatically.

You don't have to enter this data manually later if you use your ORCID iD early on in the publishing process.
A New Statistical Approach to Characterize Chemical-Elicited Behavioral Effects in High-Throughput Studies Using Zebrafish

PLOS ONE

2017-01-18 | journal-article

DOI: 10.1371/journal.pone.0169408

Source: Crossref ★ Preferred source (of 2)
Questions about ORCID?
CONTEXT
@ NC State University
CONTEXT: NC State University’s Goals

- Enhance Student Success through Educational Innovation
- **Enhance Scholarship & Research by Investing in Faculty and Infrastructure**
- Enhance Interdisciplinary Scholarship to Address the Grand Challenges of Society
- Enhance Organizational Excellence by Creating a Culture of Constant Improvement
- Enhance Local & Global Engagement through Focused Strategic Partnerships
Office of Research & Innovation
+ NC State University Libraries
= ORCID Institutional Membership
Past efforts

- Initial outreach to encourage use of ORCID.
- Challenges.
- Lessons learned.
Citation Index

https://ci.lib.ncsu.edu

Collection of citations of works by NC State affiliated people.
Citation Index

https://ci.lib.ncsu.edu

Connect ORCID iD with Unity ID

Libraries’ Value Add
Encourages adoption of ORCID
NC State University Libraries has asked for the following access to your ORCID Record:

- Add/update your research activities (works, affiliations, etc)
- Read your information with visibility set to Trusted Parties
- Add/update other information about you (country, keywords, etc.)

This application will not be able to see your ORCID password or any other information in your ORCID record with visibility set to Only me. You can manage permission granted to this and other Trusted Organizations in your account settings.

Authorize

Deny
Karen E. Daniels

**ORCID ID**
https://orcid.org/0000-0001-6852-3594

**Websites**
Lab Web Page

**Employment (3)**

- **North Carolina State University: Raleigh, NC, US**
  - 2005-07 to present | Assistant Professor; Associate Professor; Professor (Physics)
  - Employment
  - **Source:** Karen E. Daniels ★ Preferred source

- **Duke University: Durham, NC, US**
  - 2002-09 to 2005-06 | Research Associate (Physics)
  - Employment
  - **Source:** Karen E. Daniels ★ Preferred source

- **St. Ann's School: Brooklyn, NY, US**
  - 1994-09 to 1997-06 | Science Teacher
  - Employment
  - **Source:** Karen E. Daniels ★ Preferred source

**Education and qualifications (2)**

- **Cornell University: Ithaca, NY, US**
  - 1997-08 to 2002-08 | M5, PhD (Physics)
  - Education
Betweenness centrality as predictor for forces in granular packings

Soft Matter.
By: J. Kollmer & K. Daniels

10.1039/C8SM01372A
Find Text @ NCSU
arxiv.org (repository)
Michael Dickey (Chemical & Biomolecular Engineering)
https://ci.lib.ncsu.edu/profiles/mddickey
ORCID + Citation Index

1. For works we know about we can push those citations to ORCID to help get your ORCID record started.
2. The Citation Index application can discover new works via ORCID.
Local Auto-Updates

- Link ORCID iD to Unity ID with the Libraries through the Citation Index: https://ci.lib.ncsu.edu
- Whenever your ORCID record is updated...
- Libraries' Citation Index profile gets auto-updated with the citation from ORCID.
- Local systems can be updated.
Ismail Guvenc
Associate Professor

Dr. Ismail Guvenc (senior member, IEEE) received his Ph.D. degree in electrical engineering from University of South Florida in 2006. He was with Mitsubishi Electric Research Labs during 2005, with DOCOMO Innovations between 2006-2012, and with Florida International University between 2012-2016. Since 2016, he has been an Associate Professor with the Department of Electrical and Computer Engineering at North Carolina State University. His recent research interests include 5G wireless systems, communications and networking with drones, and heterogeneous wireless networks. He has published more than 130 conference/journal papers and book chapters, and several standardization contributions. He co-authored/co-edited three books for Cambridge University Press, served as an editor for IEEE Communications Letters (2010-2015) and IEEE Journal on Selected Areas in Communications, and received several awards.

CONTACT

iguven@ncsu.edu
Engineering Building II (EB2) 3060
Campus Box 7911

RESEARCH FOCUS

Communications and Signal Processing
Networking
PUBLICATIONS

- Angle Feedback for NOMA Transmission in mmWave Drone Networks (2019)
- Guest Editorial Special Issue on Unmanned Aerial Vehicles Over Internet of Things (2019)
- Impact of Random Receiver Orientation on Visible Light Communications Channel (2019)
- Interference Management in UAV-Assisted Integrated Access and Backhaul Cellular Networks (2019)
- Non-Orthogonal Multiple Access for mmWave Drone Networks With Limited Feedback (2019)
- Privacy Preserving Distributed Matching for Device-to-Device IoT Communications (2019)
NOMA for VLC Downlink Transmission With Random Receiver Orientation (2019)
Non-Orthogonal Multiple Access for mmWave Drone Networks With Limited Feedback (2019)
Privacy Preserving Distributed Matching for Device-to-Device IoT Communications (2019)
A MAP-Based Layered Detection Algorithm and Outage Analysis Over MIMO Channels (2018)

View all publications
Ismail Guvenc

Electrical & Computer Engineering

Dr. Ismail Guvenc (senior member, IEEE) received his Ph.D. degree in electrical engineering from University of South Florida in 2006, with an outstanding dissertation award. He was with Mitsubishi Electric Research Labs during 2005, and with DOCOMO Innovations Inc. between 2006-2012, working as a research engineer. Since August 2012, he has been an assistant professor with Florida International University. His recent research interests include heterogeneous wireless networks and future radio access beyond 4G wireless systems. He has published more than 80 conference and journal papers, and several standardization contributions. He co-authored/co-edited three books for Cambridge University Press, is an editor for IEEE Communications Letters and IEEE Wireless Communications Letters, and was a guest editor for four special issue journals/magazines on heterogeneous networks. Dr. Guvenc is an inventor/coinventor in 23 U.S. patents, and has another 4 pending U.S. patent applications. He is also a recipient of the 2014 Ralph E. Powe Junior Faculty Enhancement Award.
A Survey of Air-to-Ground Propagation Channel Modeling for Unmanned Aerial Vehicles

*IEEE Communications Surveys & Tutorials, 21*(3), 2361–2391.


10.1109/COMST.2019.2915069

Find Text @ NCSU

arxiv.org (repository)

Source: ORCID

Angle Feedback for NOMA Transmission in mmWave Drone Networks


By: N. Rupasinghe, Y. Yapici, *I. Guvenc*, M. Ghosh & Y. Kakishima

10.1109/JSTSP.2019.2905226

Find Text @ NCSU

arxiv.org (repository)

Source: ORCID
A Survey of Air-to-Ground Propagation Channel Modeling for Unmanned Aerial Vehicles

IEEE Communications Surveys & Tutorials, 21(3), 2361–2391.

By: W. Khawaja, I. Guvenc, D. Matolak, U. Fiebig & N. Schneckenburger

doi: 10.1109/COMST.2019.2915069

Find Text @ NCSU

arxiv.org (repository)
Institutional ORCID Membership

ORCID API (write)
CV Service
CV Service

- Want to help with the backlog of citation data entry for ORCID.
- Can use a CV (or another list of citations or link to citations) submitted to us.
- Convert citations into a machine-readable, reusable format.
- Deduplicate citations.
- Find DOIs to enhance data about works.
- Find links to open access copies.
- Jumpstart ORCID records by adding citations with DOIs to ORCID.
5 Minutes to Register & Send a CV

1. Register ORCID iD with the Libraries. Can create ORCID iD as part of the process if don't already have one. Get started here: https://ci.lib.ncsu.edu
2. Send us your CV (or another list of citations or a link to a list of citations) with a short upload form. https://ci.lib.ncsu.edu/user/cv-service

That's it. We take it from there.
Save the Time of the Researcher
Amplify their Research Impact
Unlock Services
Results
<table>
<thead>
<tr>
<th>Name</th>
<th>Works, including open access</th>
<th>ORCID ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Martha Burford Reiskind</td>
<td>12 works, including 3 open access</td>
<td><a href="https://orcid.org/0000-0001-6826-9215">https://orcid.org/0000-0001-6826-9215</a></td>
</tr>
<tr>
<td>Gavin Conant</td>
<td>71 works, including 43 open access</td>
<td><a href="https://orcid.org/0000-0002-8677-4933">https://orcid.org/0000-0002-8677-4933</a></td>
</tr>
<tr>
<td>Betty Gardner</td>
<td>2 works, including 1 open access</td>
<td><a href="https://orcid.org/0000-0001-5805-7841">https://orcid.org/0000-0001-5805-7841</a></td>
</tr>
<tr>
<td>Christopher Halweg</td>
<td>1 work, including 1 open access</td>
<td><a href="https://orcid.org/0000-0002-1695-9991">https://orcid.org/0000-0002-1695-9991</a></td>
</tr>
<tr>
<td>Adam Hartstone-Rose</td>
<td>79 works, including 25 open access</td>
<td><a href="https://orcid.org/0000-0001-5307-5573">https://orcid.org/0000-0001-5307-5573</a></td>
</tr>
<tr>
<td>Caiti Heil</td>
<td>14 works, including 13 open access</td>
<td><a href="https://orcid.org/0000-0002-2864-1315">https://orcid.org/0000-0002-2864-1315</a></td>
</tr>
</tbody>
</table>
A Review and Tutorial of Machine Learning Methods for Microbiome Host Trait Prediction

*FRONTIERS IN GENETICS.*

By: Y. Zhou & P. Gallins


Find Text @ NCSU

[www.frontiersin.org](http://www.frontiersin.org) (publisher PDF)

Source: Web Of Science

Added: July 15, 2019
Digital Measures

Any citations we get in the Citation Index we can provide for ingest into Digital Measures.
Electronic Research Administration Systems
Outreach
“Now, every time I have a new publication, my ORCID profile is updated automatically... It’s magic!”

—Katharina Stapelmann, Nuclear Engineering

NC STATE UNIVERSITY LIBRARIES ORCID SERVICES

• Send us your CV to update your Citation Index profile.
• We will enrich your citations by searching for DOIs and open access copies.
• Your publications listings on some college and department faculty directory pages will automatically update.
• Receive hands-on support for getting your publications into ORCID and maintaining your profile.
• Invite us to a faculty meeting to present on ORCID and help get everyone signed up.
• Sign up to be notified of more services coming soon!

Contact the Libraries for support at group-lib-citations@ncsu.edu

ORCID membership is brought to you by the NC State University Libraries in partnership with the Office of Research and Innovation.
Future Directions
ORCID 2019: It’s all about researchers

- Understanding researcher needs in arts/humanities, computing/engineering, and pharma/clinical medicine
- Improving user experience
  - Platform provider partners program
  - Establishing baseline integration specs
  - Embedding iDs in funder workflows
  - Collecting ORCID record data into forms
- Citing a person
- Assertion transparency and trust
Future for NC State University

Push more types of researcher outputs to ORCID:

- Patents.
- Data sets.
- Funding?
- Awards?
Questions
Questions

Have you and/or your colleagues/researchers encountered ORCID iD requests from funders? If so, how do you currently handle those requests?
Questions

What are some services that you’re interested in providing that we have not mentioned during this presentation?
Contact and more information

**NC STATE** University Libraries
Mira Waller | Head, Research Engagement | mpark@ncsu.edu
https://orcid.org/0000-0003-3829-1803

Jason Ronallo | Head, Digital Library Initiatives | jnronall@ncsu.edu
https://orcid.org/0000-0002-6080-7549

Citation Index: https://ci.lib.ncsu.edu