POSTDOC IDENTIFICATION AND TRACKING

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THE PROBLEM
CASE STUDY: HARVARD UNIVERSITY

- Decentralized campus
  - 10 separate schools
  - Tracking systems for postdocs vary across schools
    - FAS: 4 different school-wide systems used to track postdocs
    - Many departments also maintain their own tracking systems

CHALLENGE: How can we identify our postdocs in an efficient way?
Various funding sources

- Over 1,000 postdocs are not on payroll, due to funding requirements
- Postdocs off payroll are typically not benefits eligible

**CHALLENGE:** How can we ensure equity given different funding requirements?
Case Study: Harvard University

- Postdoc outcomes difficult to track
  - NSF: Early Career Doctorates Survey update
  - Need for exit data on the local level remains

Challenge: How can we capture data on outgoing postdocs?
NATIONAL EFFORTS
NIH - ACD WORKING GROUP ON THE BIOMEDICAL RESEARCH WORKFORCE

- Chaired by Shirley Tilghman (Princeton) and Sally Rockey (NIH)
  - Modeling Subcommittee chaired by Bruce Weinberg (OSU) and Donna Ginther (KU)

- **Charge**
  - Develop a model for a sustainable and diverse U.S. biomedical research workforce
  - Make recommendations to support a future sustainable biomedical infrastructure.
Requires NIH eRA Commons Accounts

The NIH already requires Commons Accounts

- Students and postdocs
  - On NRSA Since 1974
  - Comprehensive evaluation studies
  - NRSA service payback
  - Legally enforceable

NIH Reform Act of 2006

- Evaluate Postdocs (and students) as for NRSA
- Require Commons Account beginning in FY 2010

Extend eRA Commons Account requirement to students on NIH projects

- NIH Reform Act of 2006
- Capture in annual progress report
- Implement for October 2014
- NRSA Tables
- Automate
  - Build on NIEHS/FIC CareerTrac and NINDS Trainee Tracking System
- Shared database with Program Directors
  - Prepopulate with existing appointment data and SciENcv
  - Extend reporting period to 15 years
  - Include non-NRSA students and postdocs that participate in the training program
  - Information available to reviewers
  - Information also available to analysts for tracking and evaluation
COMPREHENSIVE NIH TRACKING OPTIONS (CONT.)

- Build SciENcv – Create on-line, structured biosketches
  - NLM/NCBI,
    - other Federal Agencies,
    - Federal Demonstration Partnership (FDP)
  - Create auto-populated, CV-like data collections
  - generate biosketches for application for Federal grants
  - Easy to generate SciENcv
  - Available as beta version
  - Eventually replace biosketch images
  - Unambiguous, claimed links between researchers - their grants and – their scientific output
  - Substantial update by Summer
  - NSF added by October
SciENcv BETA VERSION, INTRODUCED SEPTEMBER 2013

Inputs
- ORCID
- eRA Commons
- NCBI My Bibliography

SciENcv
- IDs
- Name
- Affiliation
- Education
- Honors
- Awards
- Personal Statement
- Contributions
- Grants
- Publications
- Collaborators
- Patents
- etc.

Output
- NIH Biosketch

National Institutes of Health
Office of Extramural Research
CONNECTING YOUR ORCID

CONNECTING
SciENCV
WITH YOUR ORCID RECORD

SciENCV

has asked for the following access to your ORCID Record

Read limited info from your ORCID Record

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

Deny  Authorize

SciENCV

SciENCV is a tool to create a shared, voluntary researcher profile system for all individuals who receive or are associated with research investments from federal agencies, in order to reduce administrative burden for researchers and government in federal grant submission and reporting requirements.

National Institutes of Health
Office of Extramural Research
BIOSKETCH PDF EXPORT
COMPREHENSIVE NIH TRACKING OPTIONS (CONT.)

- Adopt the use of Open Researcher and Contributor IDs (ORCID)
  - Some publishers require authors to associate ORCID IDs
  - Brisk adoption
  - Portal to ORCID within SciENcv
  - Consume ORCID and eventually other attributes in ORCID
  - Associate ORCID IDs with publications and grants
  - Facilitate identification of individuals and their scientific contributions wherever they are stored
  - Facilitate identification of individuals across systems (agency to agency)

http://orcid.org/0000-0002-2276-4656
PLANS FOR SciENcv ENHANCEMENTS REQUIRED BY NIH

- Multiple NIH biosketches – clone from existing
- Describe scientific contributions
- Non-publication output – prepopulate RPPR-Section C
- Users pull data from external profile systems (e.g., VIVO)
- Variable levels of information exposure
- API transfer data to/from EndNote, Linked In, etc.
- Allow delegates
- Additional output options
- Pilot SciENcv-generated electronic biosketch with an RFA
- Revised biosketch pilot
- Add NSF by October 2014
Work with NSF

- Expand longitudinal data collection to those with foreign doctorates
- Hire a labor economist
  - Ideally describe the entire population of PhDs in biomedicine
  - Census and dynamics within each sector and career stage
- Develop credible, actionable workforce models of biomedical research
WHY DO WE NEED A PERSISTENT IDENTIFIER?

- **Names**
  - Common names
  - Multiple names/transliterations
  - Name changes, esp. for women

- **Siloed systems unable to connect**
### The ORCID ID
- Unique, persistent identifier for researchers & scholars—a standard
- Free to researchers
- Can be used throughout one’s career, across professional activities, disciplines, nations & languages
- Embedded into workflows & metadata
- API enables interoperability between siloed systems

### The ORCID Organization
- Non-profit, non-proprietary, open, and community-driven
- Global, interdisciplinary
- Supported by the membership of organizations using the ORCID API
  - Funding organizations
  - Professional societies
  - Universities & research institutes
  - Publishers
WHAT INFORMATION DOES ORCID CAPTURE?

- iD
- Name variants
- Education
- Employment
- Funding
- Works—publications, data, & more
## HOW CAN ORCID HELP WITH OUTCOMES TRACKING?

<table>
<thead>
<tr>
<th>Persistent identifier</th>
<th>ORCID Public Data File</th>
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<tbody>
<tr>
<td>▪ The ORCID identifier stays with a researcher throughout their career</td>
<td>“All data contributed to ORCID by researchers or claimed by them will be available in standard formats for free download (subject to researchers’ own privacy settings) that is uploaded once a year and released under a CC0 waiver.”</td>
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<td>▪ Connects them reliably with their research outputs</td>
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<tr>
<td>▪ Improves discoverability of their research</td>
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<tr>
<td>▪ Better connects them with diverse systems</td>
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### 130 Member Organizations and Growing

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<tr>
<td>Universities and Research Organizations</td>
<td>Boston Univ, CalTech, Cambridge Univ, Chalmers Univ Technology, Charles Darwin Univ, Chinese Academy of Sciences Library, CERN, Cornell Univ, EMBL (EBI), FHCRC, Glasgow Univ, Harvard Univ, IFPRI, KACST, KISTI, Consorcio Madroño, Forschungszentrum Jülich, KTH Royal Inst Tech, MIT, MSKCC, National Institute of Informatics, National Taiwan Univ College of Medicine, National Taiwan Normal Univ, NYU Langone Medical Center, Oxford University, Penn State, Purdue Univ, Riga Technical Univ, SUNY-Stonybrook, Texas A&amp;M Univ, Univ Bern, Univ. Cadiz, Univ Carlos III de Madrid, Univ Oviedo, Univ Zaragoza, Univ College London, Univ Colorado, Univ Hong Kong, Univ Kansas, Univ Manchester, Univ Michigan, Univ Missouri, Univ Politécnica Madrid, Univ. Waikato, Univ Washington Almtecm, Association of Users of Ukrainian Research and Academic Network, Australian National Data Service, AVEDAS, British Library, Copyright Clearance Center, CrossRef, DataCite, Dryad, F1000 Research, Faculty of 1000, figshare, Impact Story, Knodle, M2Community, OCLC, PubMed Europe (EBI), Symplectic, Thomson Reuters, Überresearch</td>
</tr>
<tr>
<td>Repositories and Profile Systems</td>
<td>AsiaPac 13%, Americas 50%, EMEA 37%</td>
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**Diagram:**

- **Publishers**
- **Associations**
- **Funders**
- **Universities and Research Orgs**
- **Repositories and Profile Systems**
FUNDING ORGANIZATIONS

- Funding organizations are requesting ORCID iDs
- Funders have the potential to capture ORCID information to improve grant submission process for researchers
“AGU is implementing ORCIDs in our member records, editorial databases, and papers. Having the ability to uniquely identify scientists helps the society, editors, authors, and members in many ways, from improving efficiency to providing services and support.”

Brooks Hanson, Director of Publications, American Geophysical Union, http://orcid.org/0000-0001-6230-7145

Other professional society integrations in development:
- Society for Neuroscience
- Modern Language Association
- IEEE
Publishers are now requesting ORCID IDs in manuscript submission. Data then flows into search tools like PubMed, Scopus, and WOS. ORCID iD is a part of the metadata— in addition to the author’s name. Works are discoverable—and distinguishable from others—by iD, not just name.
Creating ORCID iDs for:
- 10,000+ grad students
- All postdocs
- All faculty
- Also tying to ETDs & campus directory

Why?
- Having an ORCID iD is part of your professional identity as a scholar
- A persistent identifier will help TAMU track future career outcomes
YOUR THOUGHTS?
DISCUSSION

- Small groups

- Questions:
  - Current data needs?
  - Current data collection systems?
  - Obstacles?
  - Community opportunities?
  - Other opportunities for data exchange?
  - How can groups benefit?
    - Postdocs
    - PDOs/PDAs
    - Institutional stakeholders – which ones?