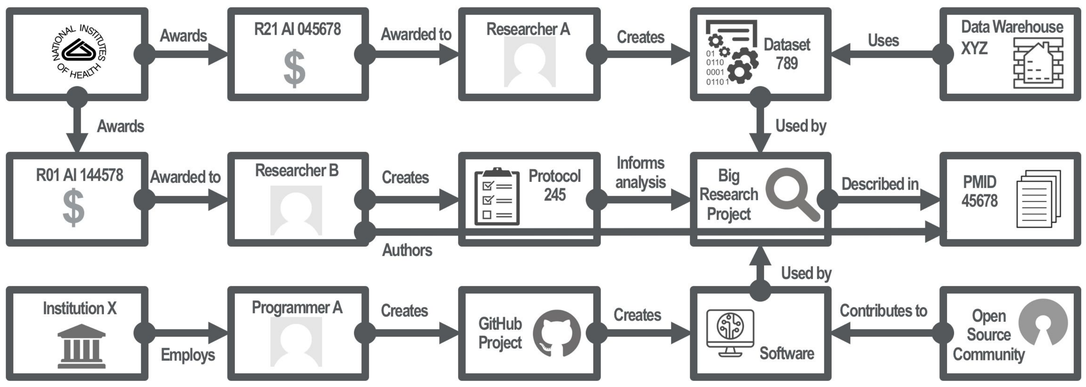
People + Technology + Data + Credit

Developing a sustainable community-driven approach to attribution

NATIONAL CENTER FOR DATA TO HEALTH

What needs to be considered?
Let's look at a common workflow for a technical project:



Community contributions are invisible to existing credit mechanisms

Join us!

Workshop: An attribution workshop will be held in the spring of 2019 in Chicago, IL, USA

More info: http://bit.ly/AttributionSignUp

Technical Motivators

- More complete research graph
- More complete understanding of associated research objects
- More timely & complete research graph
- Better linking of research objects and roles
- Better data to & from publishing community
- New and better ways to "serve up" research information
- More appropriate expertise leads to better quality reviews
- More complete understanding of potential contributions

Institutional Motivators

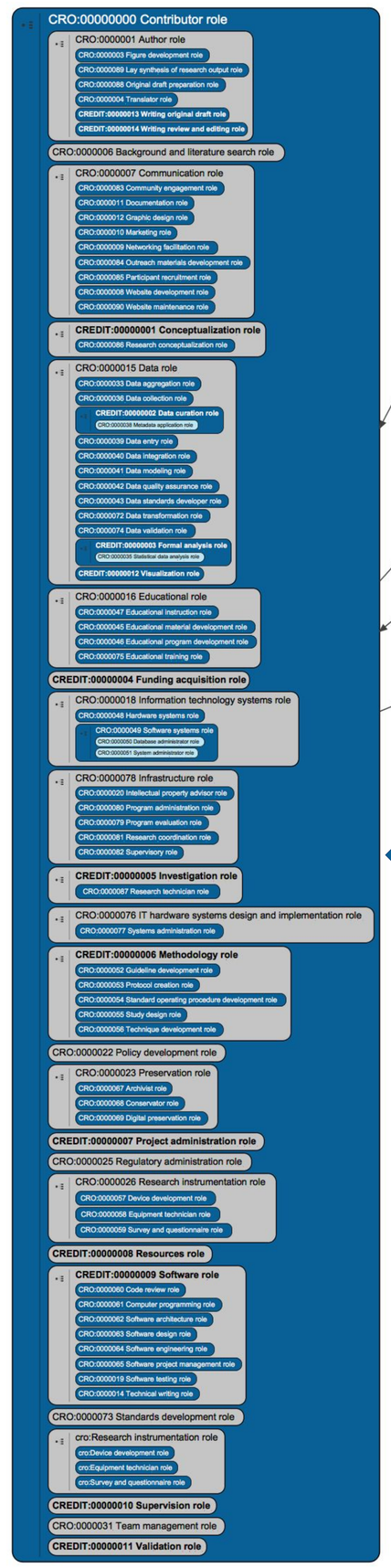
- Better understanding of team expertise
- Better data to & from publishing community
- Better data for strategic planning and decision making
- More effective team formation
- Ease reporting burdens
- Better understanding of capacity
- Support continuous improvement
- Efficient & representative P&T process
- Local repository & CRIS integrations
- Profiles for a diverse workforce
- Targeted professional development across the workforce spectrum
- New routes to communicate research outcomes

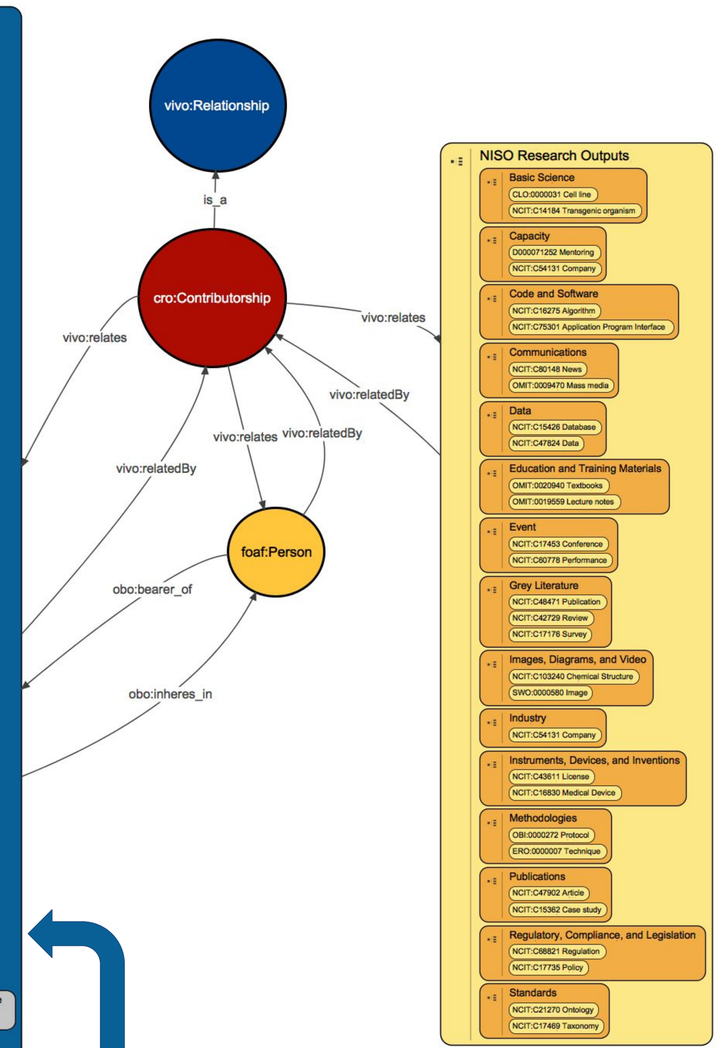
Cultural Motivators

- Credit where credit is due
- Representation of diverse research objects helps ID translation
- Recognition & credit for community partners
- Efficient & effective tracking
- Communicate research impact
- Credit for everyone
- Better accountability
- Evidence "bread crumb trails" are more visible

Contribution Role Ontology

A structured representation of scholarly contributions and research outputs





Contribution Role Ontology

The Contribution Role Ontology (CRO) contains classes representing scholarly contributions. The CRO imports classes from the CRediT ontology[1] (computational version of the CRediT taxonomy[2]), in **bold**.

NISO Research Outputs

Classes from the CRO have relationships to scholarly outputs, which are represented as NISO research outputs[3]. The top level terms are the NISO high level classifications and the lower level terms are some examples subtypes, with corresponding ontology mappings (more expansive list of subtypes available).

References

1. *https://github.com/data2health/credit-ontology*
2. *https://casrai.org/credit/*
3. NISO RP-25-2016 Outputs of the NISO Alternative Assessment Metrics Project, available at *https://www.niso.org/publications/rp-25-2016-altmetrics*

By using contributor roles & research object types to develop infrastructure to understand the scholarly ecosystem, we can better understand, leverage, and credit a diverse workforce and community

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