

NAS Neuroscience in the Cloud Workshop

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Assignment of Credit, Ownership, and Licensing Breakout Session

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Assignment of Credit, Ownership, and Licensing Breakout Session

1) Credit Assignment

• **Type of data**

different kinds of credit may be more or less relevant for different kinds of data

- **Demographic**
- **Behavioral**
- **Clinical**
(diagnostic / laboratory)
- **Genetic**
- **Imaging**
- **Mobile data**
(e.g., walking, tremor, etc)
- **Electronic health records**

• **Stakeholders**

- **Source of data**
(e.g., participants [active or passive], investigators, agencies/services, etc.)
- **Role**
(e.g., generation, collection, preprocessing, analysis, uploading, curation)
- **Sources of support**
(funding, infrastructure)

• **Evaluative factors / metrics to track**

quantify credit assignment / incentivize data sharing (see below)

- **Existing / recognized credit systems** (NIH, institutions, etc)
- **Preregistration**
- **Scope/richness of data**
- **Quality of data**
(e.g., organization, pre-processing, completeness, protocol, equipment, etc.)
- **Frequency of use / impact**
- **Uniqueness**
- **Added value of data-sharing platforms**
(e.g., ease of uploading, computational/analysis services, ease of integration with other datasets, etc.)
- **Demonstrated interoperability**

• **Incentivization**

promote data sharing by facilitating credit assignment (see above)

- **Standardization** (especially of metrics)
help incentivization by making credit assignment more systematic / reliable / interpretable
- **Tracking**
(disseminate metrics, point systems, etc.)
- **Institutionalization**
(e.g., required for / rewarded by publication promotions, funding support, awards, etc.)

2) Ownership

• **Policies**

- **Determination**
(e.g., participants, investigators, institutions, funding agencies, regulators)
- **Enforcement**
(e.g., journals, funding agencies, legal)N

3) Access & Licensing

• **Scope**

- **levels of access**
(e.g. restricted fields, summary statistics, derived measures, raw data)
- **types and context of use: what is authorized?**
(e.g., inspection, reporting, re-analysis, re-distribution, open source for research, commercial use; forms of agreement)
- **levels of access: who is authorized?**
(e.g., participant, care-giver, individual investigator, local research group, department, institutional)

A few take-home points

- Standards for assignment of credit are critical for incentivizing data sharing!

Provenance

detailing steps of data collection provide opportunities for more detailed credit assignment

- Credit for data may need a different structure than for publication:

“Hollywood credits approach”

long list of specific contributions

including non-traditional ones (*e.g., crowd-sourced processing*)

- Many resources already for credit assignment & licensing in each:
 - inventory existing standards (*e.g., FORCE11, ODC-By, etc.*)
 - identify gaps