Publish your data as nanopublications!

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What
The smallest unit of publishable information: an assertion about anything that can be uniquely identified and attributed to its author

A schema built on top of proven semantic technology enabling data publishing with or without traditional research articles

The schema links an assertion to its provenance (supporting information and attribution)

Why
Publish machine-readable assertions
Facilitate automated reasoning and semantic queries over large heterogeneous data sources
Supports fine grained attribution to authors and institutions
Incentivizing data inter-operability
Persistence and universal accessibility of data
Rapid dissemination of results (enabling novel approaches to community or peer review)

Example:
Predicted gene-disease associations from text mining

One or multiple triples describing an individual association between concepts:
- statement or declaration
- measurement
- hypothetical inference
- quantitative or qualitative

Every NP has a unique and persistent identifier that is a resolvable URI
Verifies authorship and makes the nanopub immutable
How this assertion came to be

Who deserves attribution for this nanopublication?
- Authors / institutions / funding organization
- Lab technicians
- Creator / curator
- Rightsholders (+ license info)

Context
Methods
Conditions
Assumptions

Integrity Key
Nanopublication ID
Assertion
Provenance
Supporting
Attribution

This nanopub example uses 21 triples and 7 ontologies:
- Bio2RDF:GeneID
- Bio2RDF:OMIM
- Sio:Probability
- Sio:StatedValue
- Dcterms:created
- Pav:DOI
- Pav:publicationDate

www.nanopub.org/nschema

This nanopub example includes
- intent: Do not use nanopubs when:
- The OpenPHACTS project
- Find example nanopublications and learn how to make your own at:

The OpenPHACTS project
a 22-member, 3 year IMI-sponsored project to enable drug discovery by applying semantic technologies to available datasources
OpenPHACTS develops and uses nanopublications to facilitate data interoperability and to align internal and public data sources
to add your own data, download the official OpenPHACTS nanopublication guidelines at www.nanopub.org

Do not use nanopubs when:
- You do not like your data to be reused
- You like having a low impact factor
- You do not want your data to be interoperable
- Your data is too “special” to be captured in a semantic model (please discuss at www.nanopub.org)
- You do not think that sharing knowledge, data and scientific findings will help to advance science

nbit

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