

How interoperable is our semantic model and for who?

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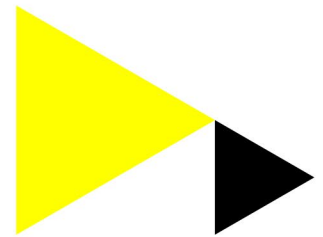
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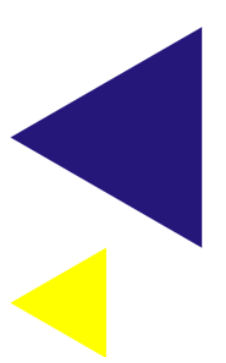
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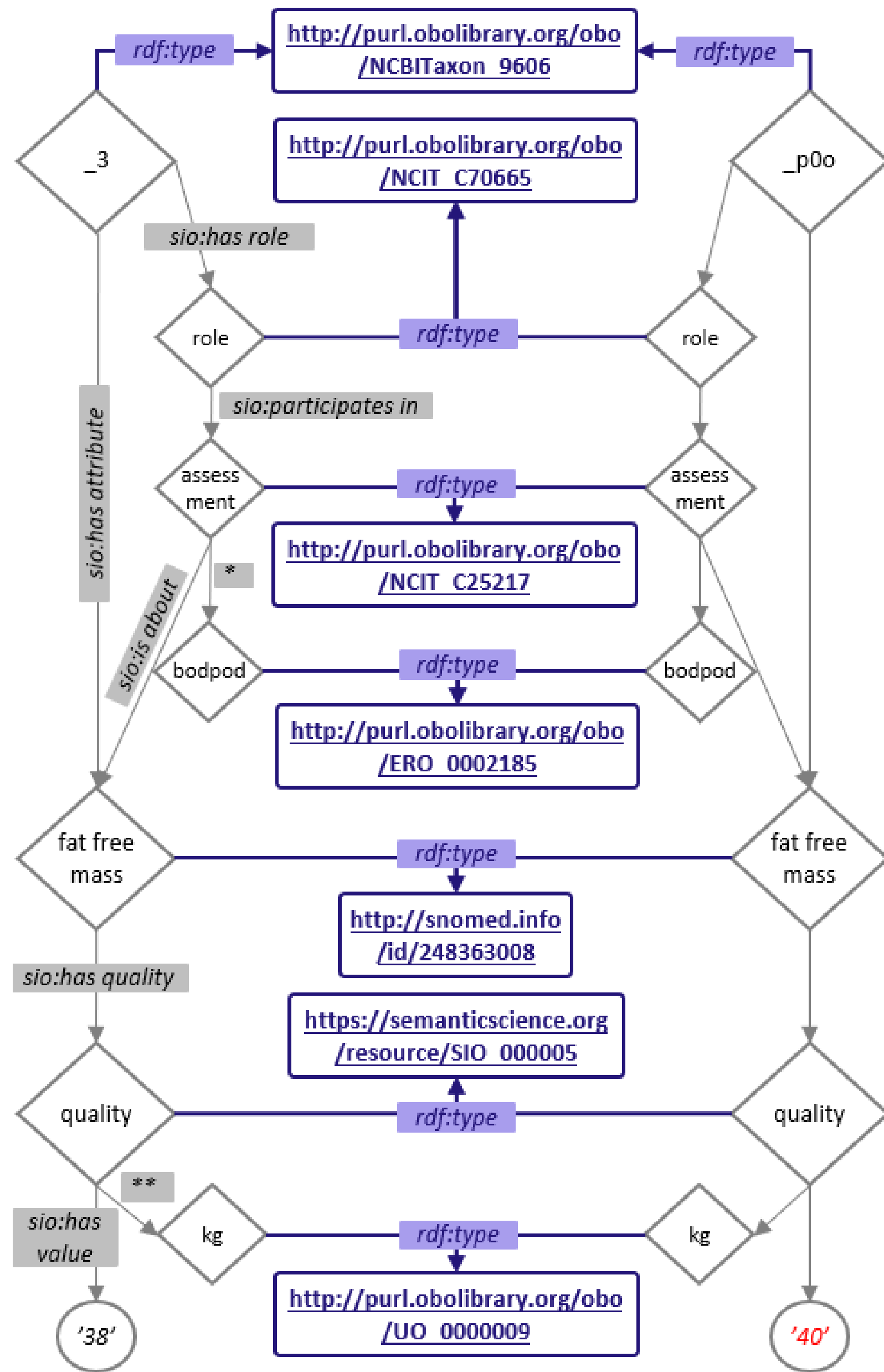
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Model

Complete model see [here](#)



Proof of Concept

- ✓ FAIRification-workflow (Jacobsen et al. 2020)
- ✓ FAIRifying 11 existing datasets from body composition measurements of patients and/or research participants
- ✓ Originally in SPSS, Excel or CSV-format
- ✓ Data:

#Age #Gender #Body weight #Body height

#Fat-free mass measured by a BODPOD

#Output from Bioelectrical Impedance Analysis

Interoperability discussion

1. Different research teams may choose different ontologies and ontology terms for the same concepts
2. Different research teams may develop different semantic models for the same dataset
3. Different research teams may go for different implementation choices
4. The datasets become less interoperable and comprehensible for our researchers not familiar with Turtle, RDF and SPARQL

Implementation choices



#Body weight

```
<https://www.hva.nl/rdf/person/2335/body_weight_attribute> a <https://loinc.org/29463-7/>;
sio:SIO_000217 <https://www.hva.nl/rdf/person/2335/body_weight_quality> .
```

```
<https://www.hva.nl/rdf/person/2335/body_weight_quality> a sio:SIO_000005;
sio:SIO_000221 <https://www.hva.nl/rdf/unit/kilogram>;
sio:SIO_000300 "100"^^<http://www.w3.org/2001/XMLSchema#float> .
```

```
<https://www.hva.nl/rdf/unit/kilogram> a <http://purl.obolibrary.org/obo/UO_0000009> .
```

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