KG-COVID-19: a knowledge graph for COVID-19 response

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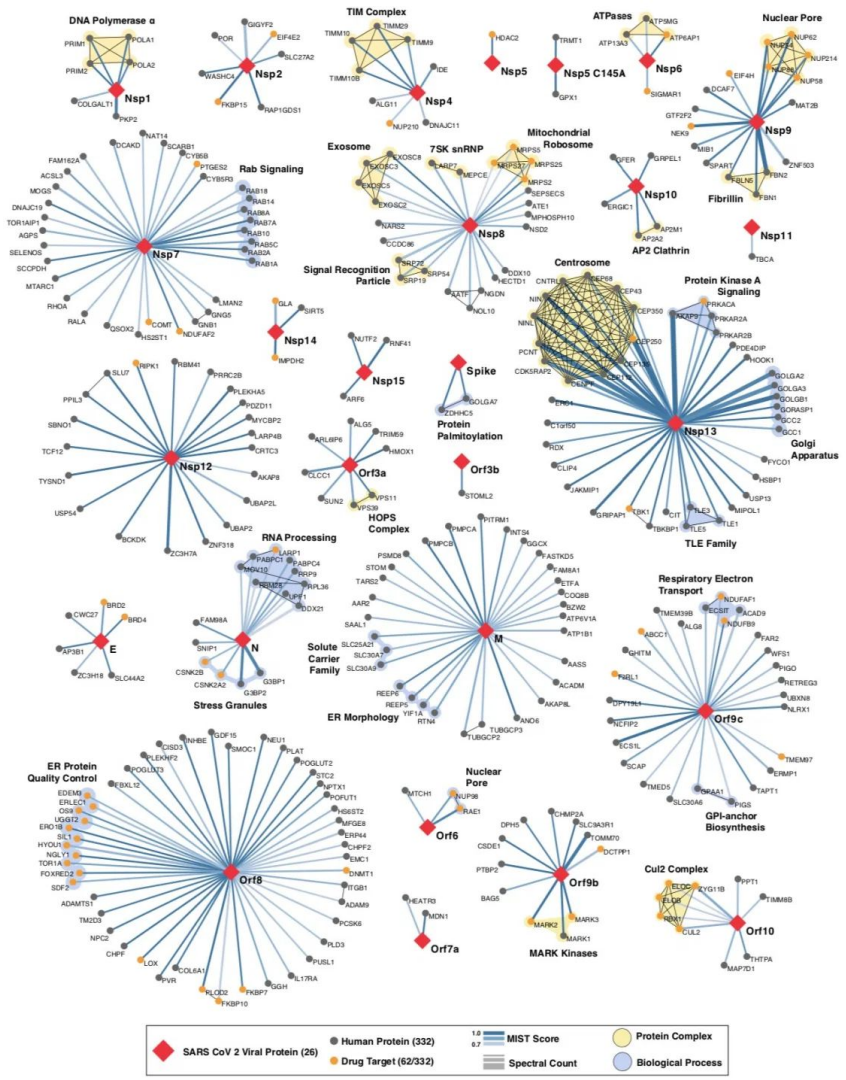

Gordon et al.
https://www.biorxiv.org/content/10.1101/2020.03.22.002386v1

https://github.com/Knowledge-Graph-Hub/kg-covid-19

Who we are:

- Team from Lawrence Berkeley National Laboratory, Monarch Initiative, and IDG

Problem:

- Lightweight construction and maintenance of knowledge graphs for COVID-19 drug repurposing efforts

Interests:

- Annotation of molecular entities
- New knowledge derived from literature
- Graph learning

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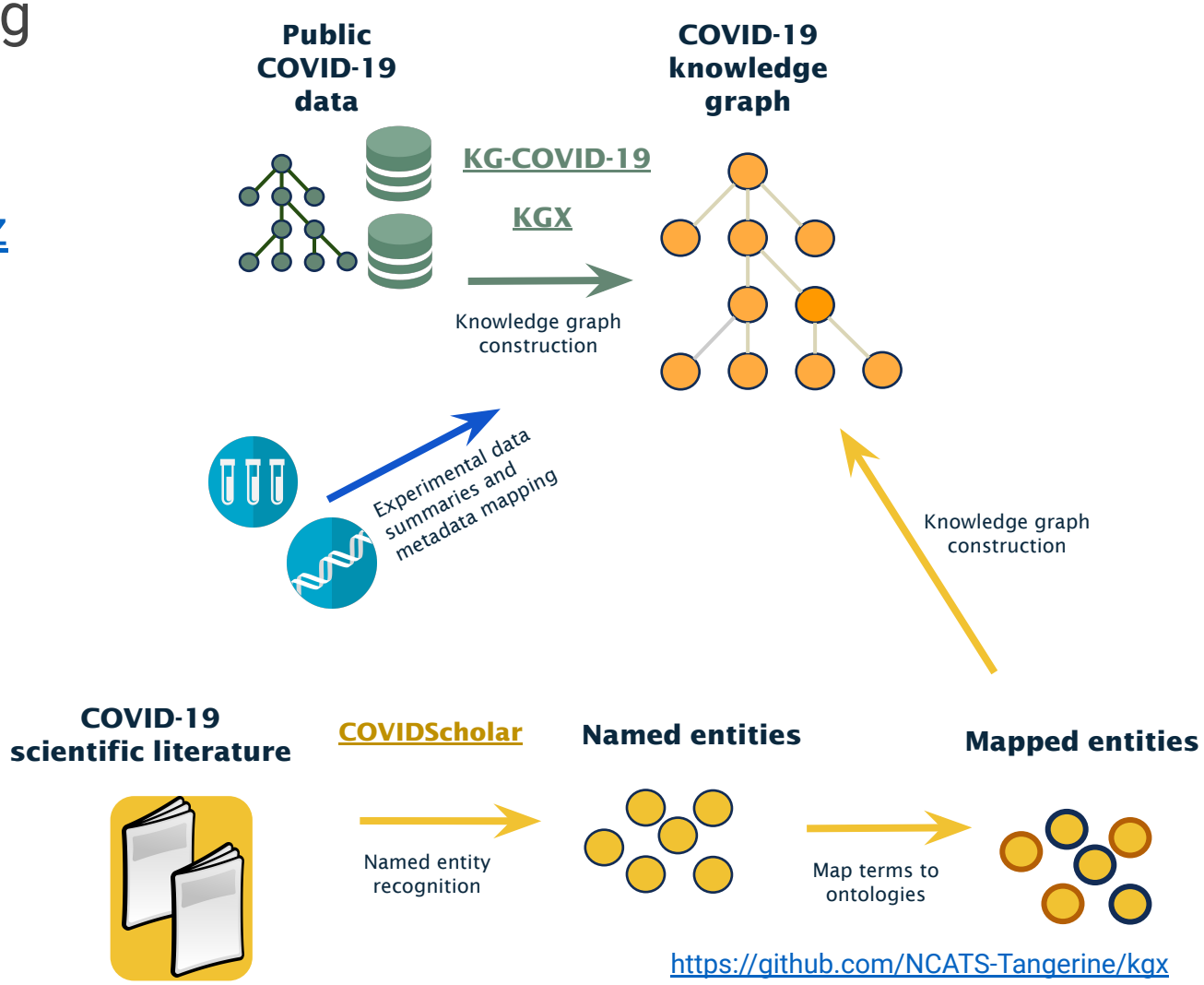
ILLUMINATING the DRUGGABLE GENOME

Approach

- Lightweight, structured ingest pipeline for standardized data
- KGX tool for deduplication and merging
- Automated builds
- RDF/TTL download
  http://kg-hub.berkeleybop.io/kg-covid-19.nt.gz
- SPARQL endpoint if demand

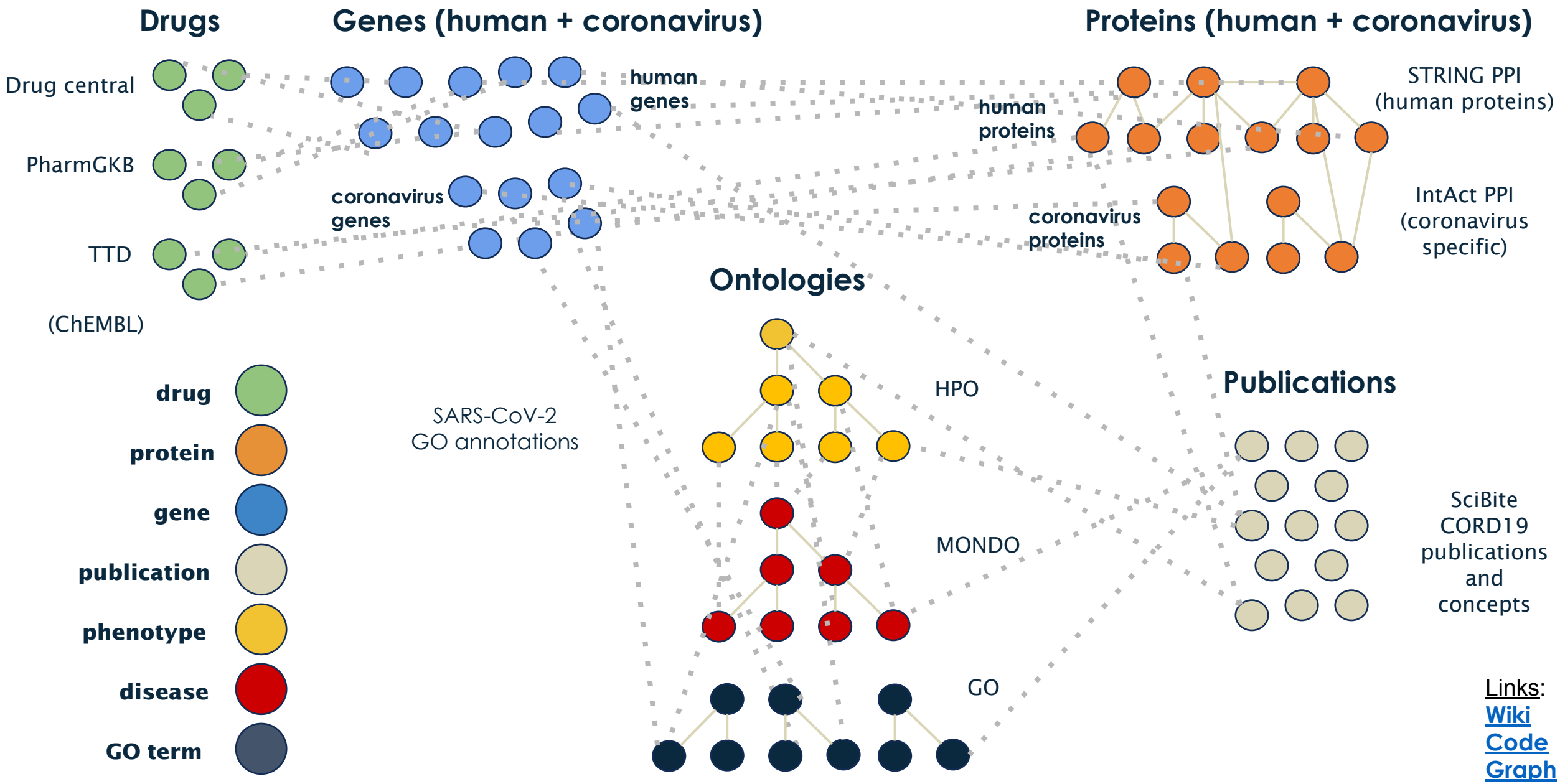
COVIDscholar.org:

- NLP effort at LBL
- Outgrowth of MATscholar.org
- Better approach to corpus
- Embedding applications

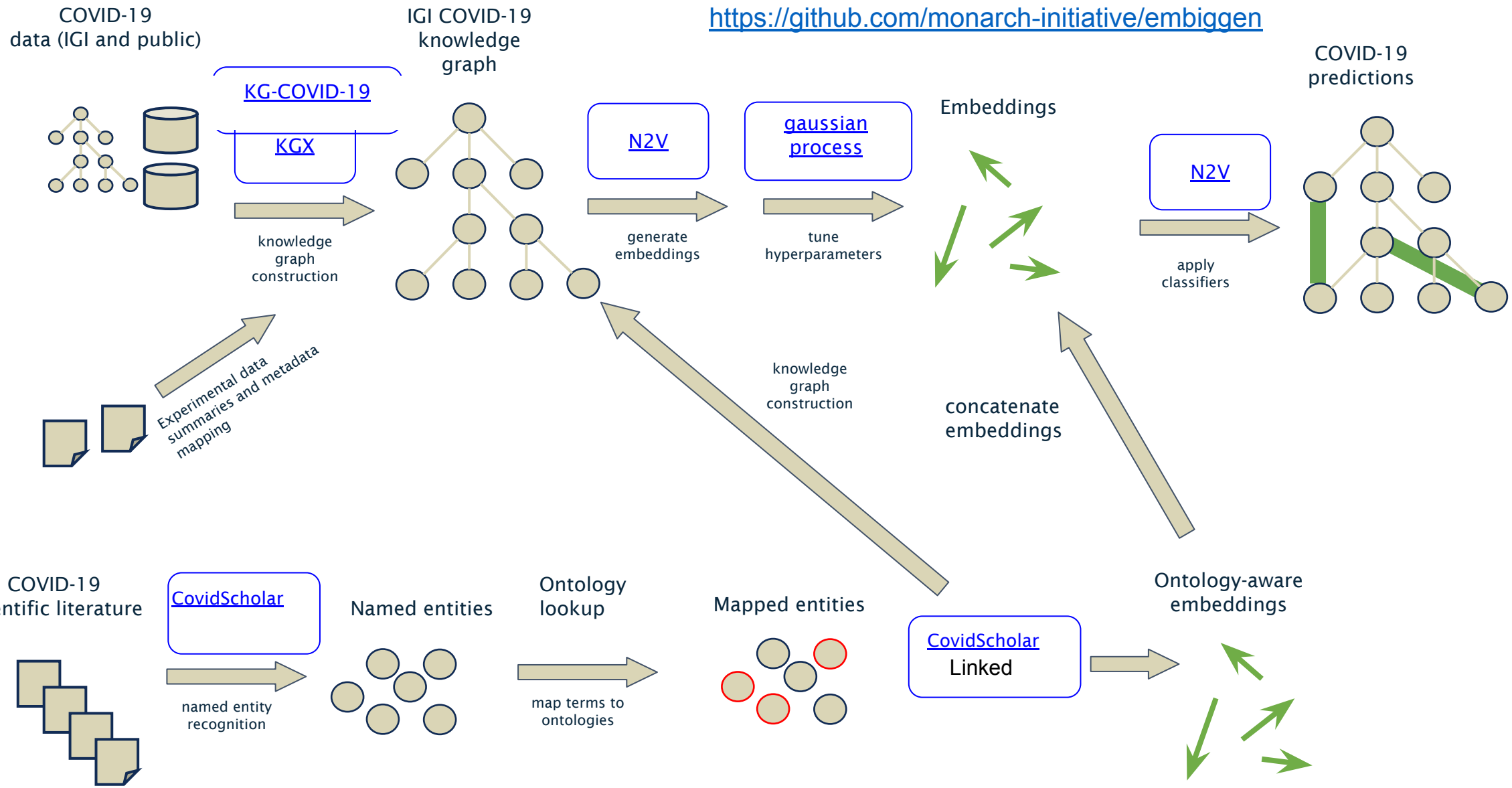


https://github.com/NCATS-Tangerine/kgx

KG-COVID-19 Knowledge Graph (May 2020)



Graph learning



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