

Q808 Wikidata

structured AND open epidemiological data

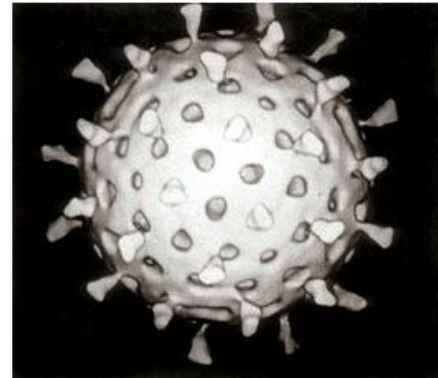
virus (Q808)

vira | virales | virii | ϋϊήρνια | Virusi | viruses | Virus

type of non-cellular infectious agent

Taxon properties

taxon rank	Kingdom
taxon name	<i>Virus</i>




- lack of structured open data about infectious diseases
- incomplete data coverage in Wikidata
- modelling of infectious diseases is harder than it should be

What is Wikidata?

- a free and open knowledge base that can be read and edited by both humans and machines
- multilingual; global
- data integration hub for biomedical science

Zika virus:

diameter	 40±1 nanometre	
	stated in	Flavivirus genome organization, expression, and replication ...

Solution

- gather epidemiological data
- don't start a new database, add to Wikidata
- expand the data model to cover other epidemiologically relevant information

New properties proposed
for Wikidata's data model

minimal incubation period in humans
maximal incubation period in humans
basic reproduction number
generation time
case fatality rate

Aim: structured open data for outbreak modeling



Mock-up: result of SPARQL query for incubation period, colour-coded by taxonomic group

Q808 users

- Medical science research
- Public health authorities
- Agricultural research
- Health professionals
- Journalists
- Students
- Automated tools

Business Model

- Part of Wikidata project – financed by voluntary donations from users – serving to data science/ scientific community

Q808 Team

- Geography: America ✓ , Europe ✓ , Asia ✓
- Expertise: medicine ✓ , microbiology ✓ , IT ✓ , public health ✓ , open data ✓
- Contributors welcome!



Path Forward

- Get new properties approved (days)
- Gather the data from diverse sources (started; days to years)
- Data can be queried via SPARQL or API (started; days to years)
- There are many options to integrate with and support other public data (months to years)

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Questions?

विषाणु (Q808)

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व्याक्सोन गुणहरू



व्याक्सोन न्याइक राज्य

व्याक्सन नाम विषाणु

