

GO FAIR US Webinar Series: FAIR Data & COVID-19

Prof. Dr. Barend Mons
Introduction to the Virus Outbreak Data Network (VODAN)

1 April 2020

#VODAN

Webinar Series Overview

- 1. Intro to VODAN (1 April)**
Prof. Dr. Barend Mons
Time: 9 AM PDT / 12 PM EDT / 6 PM CEST
- 2. VODAN-Africa / Training of Trainers (8 April)**
Prof. Mirjam van Reisen
- 3. FAIR Data Work in Action (15 April)**
Albert Mons, Luiz Bonino
- 4. Fighting COVID-19 by Mining Insights from Heterogeneous Datasets (22 April)**
Peter Rose & Ilya Zaslavsky,
Iris Shen, Natalie Meyers & Eric Morgan

A personal take on science and society

World view

Invest 5% of research funds in ensuring data are reusable



By Barend Mons

It is irresponsible to support research but not data stewardship, says Barend Mons.

Many of the world's hardest problems can be tackled only with data-intensive, computer-assisted research. And I'd speculate that the vast majority of research data are never published. Huge sums of taxpayer funds go to waste because such data cannot be reused. Policies for data reuse are falling into place, but fixing the situation will require more resources than the scientific community is willing to face.

In 2013, I was part of a group of Dutch experts from many disciplines that called on our national science funder to support data stewardship. Seven years later, policies that I helped to draft are starting to be put into practice. These require data created by machines and humans to meet the FAIR principles (that is, they are findable, accessible, interoperable and reusable). I now direct an international Global Open FAIR office tasked with helping communities to implement the guidelines, and I am convinced that doing so will require a large cadre of professionals, about one for every 20 researchers.

“ Funders hold the stick: they should disburse no further funding without a data-stewardship plan.”

Data stewardship offers excellent returns on investment. A 2018 European Commission report estimates that problems with the reuse of data cost the EU at least €10 billion each year in the academic sector alone, and €16 billion in lost innovation opportunities. I translate that as roughly €100 billion lost annually at the global level. That's not even counting related reproducibility problems.

The FAIR guiding principles are now cited three times per day, but citations do not equate to practice. My colleagues and I, along with European Open Science Cloud, an initiative aimed at promoting open-science practices, scoped requirements for the continent-wide data-sharing infrastructure. We estimated that Europe will have at least 10 million serious data producers among its 70 million science and technology professionals and 1.7 million researchers. So we will need to educate about 500,000 data stewards of various kinds to support researchers through experimental design and data capture, curation, storage, analytics, publication and reuse.

These tasks are too complex and time-consuming to leave to researchers (I wrote a whole book on why it would be a grave mistake to train every future scientist to be a fully knowledgeable data steward). Few active researchers see data stewardship as their core business, especially because

Get Involved

1. Tune in next week for VODAN-Africa
2. Join VODAN: tinyurl.com/join-vodan
3. Join RDA-COVID19 WG:
www.rd-alliance.org/groups/rda-covid19
4. Find Funding:
<https://coronavirus.frontiersin.org/covid-19-research-funding-monitor>
5. Data Volunteer Opportunities:
<https://www.usdigitalresponse.org/>
6. Join the conversation: gofair.slack.com



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