Sick of COVID?

Discover and analyze research more efficiently than ever

Grants, publications, citations, clinical trials, datasets, patents and policy documents in one place
So....is there good news?

- Brief intro to Dimensions
- Funding
- Preprints
- Open Access
- Datasets
- Clinical trials
- Policy
The Dimensions research landscape

- Grants
- Research
- Preprints
- Data sets
- Publications
- Tweets Blogs
- Clinical Trials
- Patents
- Policy docs

Pre-publication
1-5 years from grant to publication

Post publication
immediate
2-3 years
years
years
decades
The course of (comorbid) trauma-related, dissociative and personality disorders: two year follow up of the Friesland study cohort

Sanne Swart, Marleen Wildschut, Nel Draijer, Willemien Langeland, Adriaan W Hoogendoorn, Jan H Smit 2020, European Journal of Psychotraumatology - Article

Background: There is substantial comorbidity between trauma-related disorders (TRDs), dissociative disorders (DDs) and personality disorders (PDs), especially in patients who report childhood t... more

Implementation of two alcohol reduction interventions among persons with hazardous alcohol use who are living with HIV in Thai Nguyen, Vietnam: a micro-costing analysis

Natalie A Blackburn, Vivian F Go, Quynh Bui, Heidi Hutton, Radhika P Tampi, Teearda Sripaiboon, Tran V ... 2020, Global Health Action - Article

BACKGROUND: Hazardous alcohol use is detrimental to persons with HIV (PWHA), impacting medication adherence and liver function, yet globally resources to target alcohol use behavior in this population ... more
Understanding the coronavirus outbreak using Dimensions

- First detailed journal article in Dimensions
- First policy document in Dimensions
- First preprint in Dimensions
- First dataset in Dimensions
- First clinical trial in Dimensions
- First grant in Dimensions

Days since January 1, 2020
As of September 28, 2020, there are:

- **3,264** COVID-19 related awards with a start year of 2020-2021 listed in Dimensions totaling **1.8 billion USD**

- Top ten distribution (number of awarded grants) viewed by country of funder

<table>
<thead>
<tr>
<th>Country of Funder</th>
<th>Number of Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1,414</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>937</td>
</tr>
<tr>
<td>Canada</td>
<td>292</td>
</tr>
<tr>
<td>Brazil</td>
<td>173</td>
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<tr>
<td>Russia</td>
<td>121</td>
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<td>Germany</td>
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<td>Sweden</td>
<td>48</td>
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<tr>
<td>Belgium</td>
<td>47</td>
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<tr>
<td>Switzerland</td>
<td>41</td>
</tr>
<tr>
<td>Norway</td>
<td>30</td>
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</table>
Both private foundations and governmental entities are bringing millions to this fight.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Grants</th>
<th>Funding amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bill &amp; Melinda Gates Foundation (BMGF)</td>
<td>195</td>
<td>USD 241.3 M</td>
</tr>
<tr>
<td>Engineering and Physical Sciences Research Council (EPSRC)</td>
<td>112</td>
<td>USD 204.9 M</td>
</tr>
<tr>
<td>Federal Ministry of Education and Research (BMBF)</td>
<td>62</td>
<td>USD 192.4 M</td>
</tr>
<tr>
<td>European Commission (EC)</td>
<td>46</td>
<td>USD 160.0 M</td>
</tr>
<tr>
<td>Canadian Institutes of Health Research (CIHR)</td>
<td>289</td>
<td>USD 118.6 M</td>
</tr>
<tr>
<td>National Heart Lung and Blood Institute (NHLBI)</td>
<td>1</td>
<td>USD 105.6 M</td>
</tr>
<tr>
<td>Robert Wood Johnson Foundation (RWJF)</td>
<td>140</td>
<td>USD 96.1 M</td>
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<tr>
<td>Medical Research Council (MRC)</td>
<td>47</td>
<td>USD 57.6 M</td>
</tr>
<tr>
<td>Innovate UK (Innovate UK)</td>
<td>489</td>
<td>USD 50.1 M</td>
</tr>
</tbody>
</table>
Financial support is increasing geographically.
Preprints have rapidly established themselves as a mainstream research output and play a key part of COVID-19 research efforts.

From a small amount of initial preprints posted in early January 2020, they quickly accounted for around one quarter of research output by the beginning of May 2020.

COVID-19 preprints in Dimensions currently number over 28,000.
Figure 2: Research output results from querying with the boxed COVID search definition in Dimensions. Outputs are grouped week by week and are not shown cumulatively. Output types as per the legend. (data)
Context is key (aka “not all news is good news”)

COVID-19 Antibody Seroprevalence in Santa Clara County, California
Eran Bendavid, Bianca Mulaney, Neeraj Sood, Soleil Shah, Emilia Ling, Rebecca Bromley-Duffiano, Cara Lai, Zoe W... 2020, medRxiv - Preprint

Background Addressing COVID-19 is a pressing health and social concern. To date, many epidemic projections and policies addressing COVID-19 have been designed without seroprevalence data to inform epi... more

Uncanny similarity of unique inserts in the 2019-nCoV spike protein to HIV-1 gp120 and Gag
Prashant Pradhan, Ashutosh Kumar Pandey, Akhilesh Mishra, Parul Gupta, Praveen Kumar Tripathi, Manoj Balakr... 2020, bioRxiv - Preprint

Abstract We are currently witnessing a major epidemic caused by the novel coronavirus (2019-nCoV). The evolution of 2019-nCoV remains elusive. We found 4 insertions in the spike glycoprotein (S) ... more

Indoor transmission of SARS-CoV-2
Hua Qian, Te Miao, LIU Li, Xiaohong Zheng, Danling Luo, Yuguoo Li 2020, Elsevier - Preprint
Find out exactly what's being said
The majority of related publications are open access - enabling access to researchers around the world.

The total number of related publications as of September 28 is **147,874**

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
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<tbody>
<tr>
<td>All OA</td>
<td>118,245</td>
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<tr>
<td>Bronze</td>
<td>47,714</td>
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<tr>
<td>Closed</td>
<td>29,629</td>
</tr>
<tr>
<td>Green, Published</td>
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<tr>
<td>Pure Gold</td>
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<tr>
<td>Hybrid</td>
<td>12,467</td>
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<tr>
<td>Green, Submitted</td>
<td>12,218</td>
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<tr>
<td>Green, Accepted</td>
<td>558</td>
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</tbody>
</table>
The top source titles for open access content are dominated by preprint servers.
Datasets

With many labs facing challenging circumstances, sharing datasets can also accelerate progress.

There are currently over 2,000 related datasets in Dimensions.

Providing both publications and datasets to researchers at no cost helps accelerate the pace of research.
When compared to the funding map, you can clearly see the incredible geographic diversity of datasets.
Aggregated datasets from top 500 researchers with associated country metadata.
Clinical Trials

How far along are we?

There were almost 6,000 related clinical trials that started in 2020. The leaders by registry:
There are currently over 600 Phase 3 related trials being conducted around the world.
Patent records

Emerging intellectual property

There were over 100 related patent applications filed in 2020.
“Top ten” assignees on related patent applications

<table>
<thead>
<tr>
<th>Assignee</th>
<th>Country</th>
<th>Patent applications 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Pennsylvania</td>
<td>United States</td>
<td>3</td>
</tr>
<tr>
<td>Pennsylvania State University (PSU)</td>
<td>United States</td>
<td>3</td>
</tr>
<tr>
<td>United States Department of Health and Human Services (DHHS)</td>
<td>United States</td>
<td>2</td>
</tr>
<tr>
<td>Montgomery County Department of Health and Human Services</td>
<td>United States</td>
<td>2</td>
</tr>
<tr>
<td>Colorado Department of Human Services (CDHS)</td>
<td>United States</td>
<td>2</td>
</tr>
<tr>
<td>Roche (United States) (Roche)</td>
<td>United States</td>
<td>2</td>
</tr>
<tr>
<td>Utrecht University</td>
<td>Netherlands</td>
<td>2</td>
</tr>
<tr>
<td>Erasmus University Medical Center</td>
<td>Netherlands</td>
<td>2</td>
</tr>
<tr>
<td>Erasmus University Rotterdam (EUR)</td>
<td>Netherlands</td>
<td>2</td>
</tr>
<tr>
<td>Massachusetts Institute of Technology (MIT)</td>
<td>United States</td>
<td>1</td>
</tr>
</tbody>
</table>
There are currently over 2,600 related policy documents in Dimensions.

Fabio Cereda, Rafael M. Rubião, and Liliana D. Sousa
Poverty and Equity Global Practice, World Bank
July 31, 2020

How human mobility explains the initial spread of COVID-19

A European Regional Analysis

Seca, S. K., Santosmaria, C., Genni, F., Spyroulla, E., Tarchi, D., Veiga M.

2020 HUMAN DEVELOPMENT PERSPECTIVES
COVID-19 AND HUMAN DEVELOPMENT:
Assessing the Crisis, Envisioning the Recovery

"Immunity passports" in the context of COVID-19
Scientific brief
24 April 2020

World Health Organization

Public health surveillance for COVID-19
Interim guidance
7 August 2020

World Health Organization
Research is being shared more quickly than any time in our history.

Preprints and other open access outputs help accelerate research by removing financial barriers to access.

Datasets from an increasingly global set allows researchers to identify differences in data and help complement and advance ongoing analysis and research.

Clinical trials are moving ahead quickly and in high volume.

Funders are highly prioritizing related grants, translating into over 1 billion in resources to invest in solutions.
Thank you! Questions?

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