A conversation with Kaitlin Thaney on 04/10/13

Participants

- Kaitlin Thaney Manager, External Relationships, Digital Science
- Alexander Berger Senior Research Analyst, GiveWell

Note: This set of notes was compiled by GiveWell and gives an overview of the major points made by Kaitlin Thaney.

Summary

Kaitlin Thaney is the Manager of External Relationships at Digital Science. GiveWell spoke with her to learn about opportunities to improve biomedical research. We learned about Digital Science and its products, open data efforts, and other people for GiveWell to talk with about improving biomedical research.

About Digital Science

Digital Science is a subsidiary of Macmillan Publishers (who also own Nature Publishing Group) that promotes digital technologies to make scientific communication and research more efficient. It crafts tools as well as serves as an incubator for scientific start-ups and products, providing funding, scientific knowledge, context and contacts. Digital Science wholly owns and develops in -house some of its products, and is majority stakeholder for others.

Sometimes ideas for Digital Science projects come from entrepreneurs, and sometimes they come from Digital Science perceiving a gap in the scientific market.

Timo Hannay is the Managing Director of Digital Science. He was previously head of nature.com and had spent years experimenting with ideas for using digital technologies for scientific communication, including blogging, social media and a preprint server.

Digital Science's divisions

Digital Science has three divisions:

1. The *Textmining* Division.

One of Digital Science's products in this area is SureChem, which provides access to information about chemical compounds to help with early stage drug discovery.

2. The Research Tools Division. Some of Digital Science's products in this area

are:

• FigShare — a product that allows researchers to publish their data and make it citable and discoverable.

• 1DegreeBio — An open access platform for researchers to find antibodies and other biological materials.

• BioRAFT — A product designed to promote lab safety so as to minimize the number of lab accidents and deaths.

3. The *Science Metrics* Division. This division works to better measure the impact of and influence of researchers on their communities. A product in this division is altmetrics. The division is also working specifically on tools to help research administrators and funders better understand researchers' impact via integration with Digital Science's productivity tools.

Digital Science also provides \sim \$25k grants to researchers for projects to develop software for researchers or clinicians.

Open Data

Interest from others in open data

A lot of journal publishers are starting to use FigShare to store their publications' data and provide citable endpoints for individual research outputs. For example, Public Library of Science (PLOS) does this with all seven of its journals, and Faculty of 1000 (F1000) also does this.

Nature has recently started a new data journal called *Scientific Data*.

Funders are becoming more interested in open data. The National Science Foundation (NSF) has started requesting that grantees list scientific outputs such as software and data on grant applications, in addition to publications.

Some funders interested in open data products

Some funders that are interested in this space are

- The Sloan Foundation
- The Moore Foundation
- The Kauffman Foundation
- Some venture capitalists and angel investors

Digital Science works together with other funders, be they philanthropic or

commercial, so as to divide resources in the field in a way that best uses the respective organizations' core competencies.

People for GiveWell to talk to

Developers of tools for open science

- Euan Adie Founder of altmetric.com
- Mark Hahnel Founder of FigShare
- Jean-Claude Bradley Chemistry professor at Drexel University, and one of the pioneers the electronic lab notebook
- The iPython community in Berkeley
- Antony John Williams Vice President of Strategic Development at ChemSpider, and 2012 winner of Microsoft's eScience award.

Policy:

- Myron Gutman Assistant Director of the National Science Foundation. He was one of the people who was involved in NSF's shift toward asking that grant applicants list all of their research outputs rather than just their papers.
- Heather Joseph Executive Director of the Scholarly Publishing and Academic Resources Coalition (SPARC)
- Mike Stebbins Assistant Director of Biotechnology at the White House Office of Science and Technology Policy
- Chris Vein Chief Innovation Officer for Global Information and Communications Technology Development at World Bank, and Former Deputy Chief Technology Officer at the White House
- Nicola Perrin Senior Policy Adviser at the Wellcome Trust
- Liz Allen Head of Evaluation at the Wellcome Trust
- Robert Kiley Head of Digital Services at the Wellcome Trust. Robert Kylie was instrumental in the creation of the open access journal eLife.
- The UK Biotechnology and Biological Sciences Research Council (BBSRC)
- The UK Engineering and Physical Sciences Research Council (EPSRC)

The intersection between health research and open science, data sharing and reproducibility

- Ben Goldacre Author of *Bad Science* and of *Bad Pharma*
- Jason Bobe Executive Director of PersonalGenomes.org

All GiveWell conversations are available at <u>http://www.givewell.org/conversations</u>