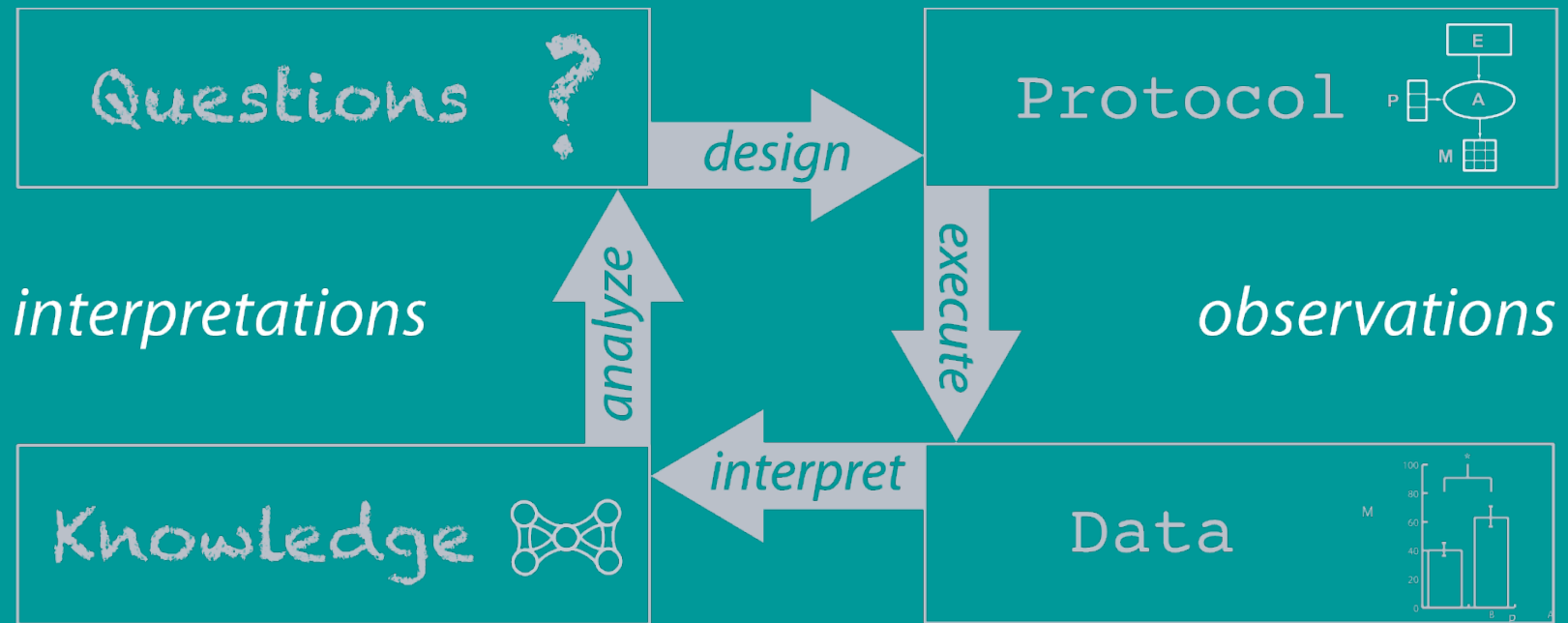


COMMUNICATING YOUR SCIENCE PART 1: YOU

Data After Dark

January 2016

The science cycle




Slide from Gully Burns



How is science traditionally communicated?



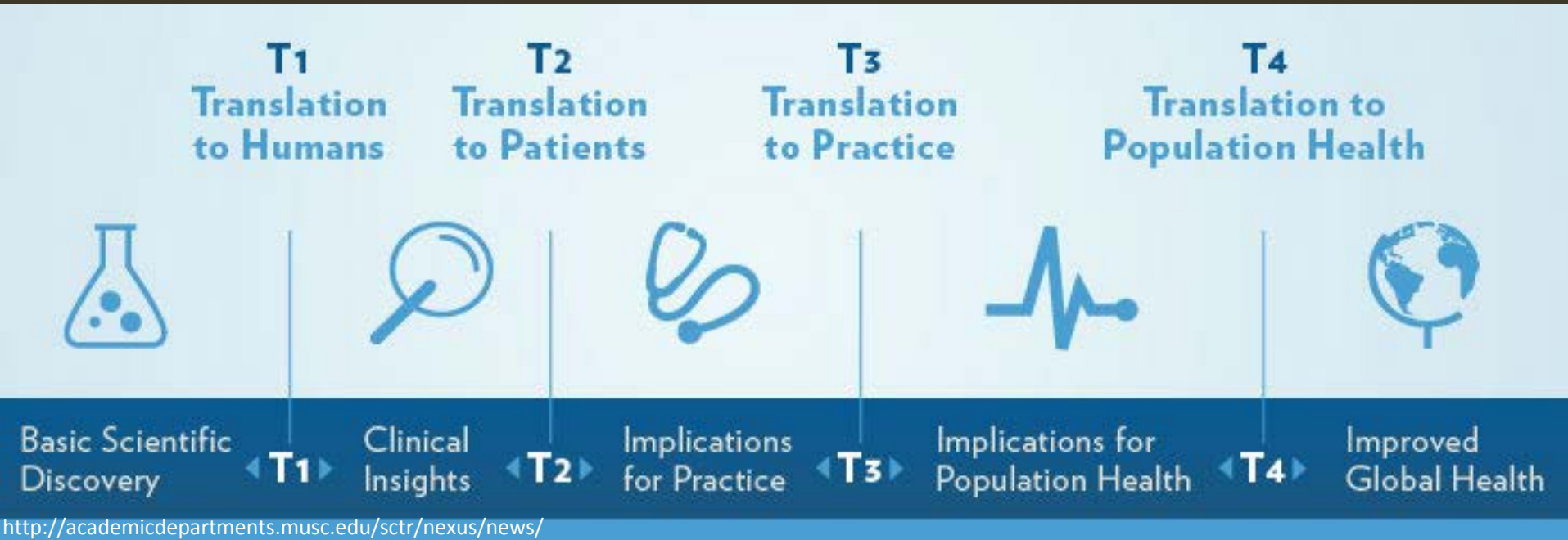
=> In some ways, it hasn't changed in 350 years



On average, timeframe from
submission to publication is

9 months

Translational Research



How long does it take to bring a basic science discovery to a marketable product?

15 years

Thinking Beyond the traditional manuscript

Raw Science

Small publications

Self-publishing

Datasets

Nanopublications

Blogging

Code

Argument or
passage

Social Networks

Experimental
design

Single figure
publications

Comments &
Reviews

Protocols/instr
uments

Annotations

How can you
manage your
scholarly
footprint?



You leave bread crumbs wherever you go

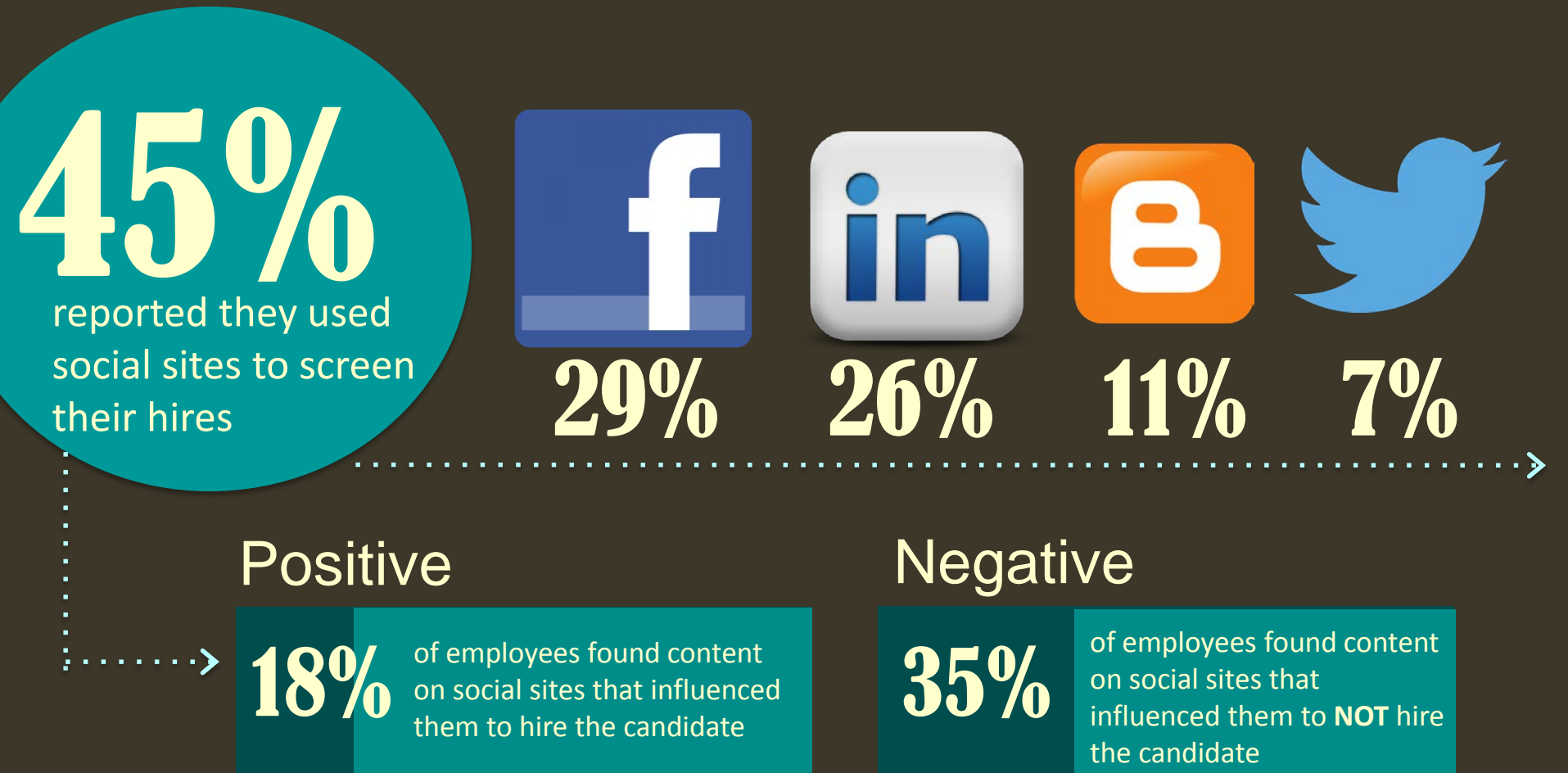


<https://aelefton.wordpress.com/2015/05/22/a-trail-of-breadcrumbs/>

How many of
you use social
media?



A survey conducted in 2009 by CareerBuilder reported how companies use social media to screen their employees



Things to avoid posting online

1 Digital dirt

Self-incriminating photos,
party pictures

3 Big mouth

Posting negative comments
about your
employer/coworkers

5 Positively negative

Keeping everything negative

Terrible troll

Trolling the internet and posting
inappropriate comments on
multiple sites

Copious contacts and comments

Adding sketchy people/strangers to your
contacts, who post inappropriate
comments

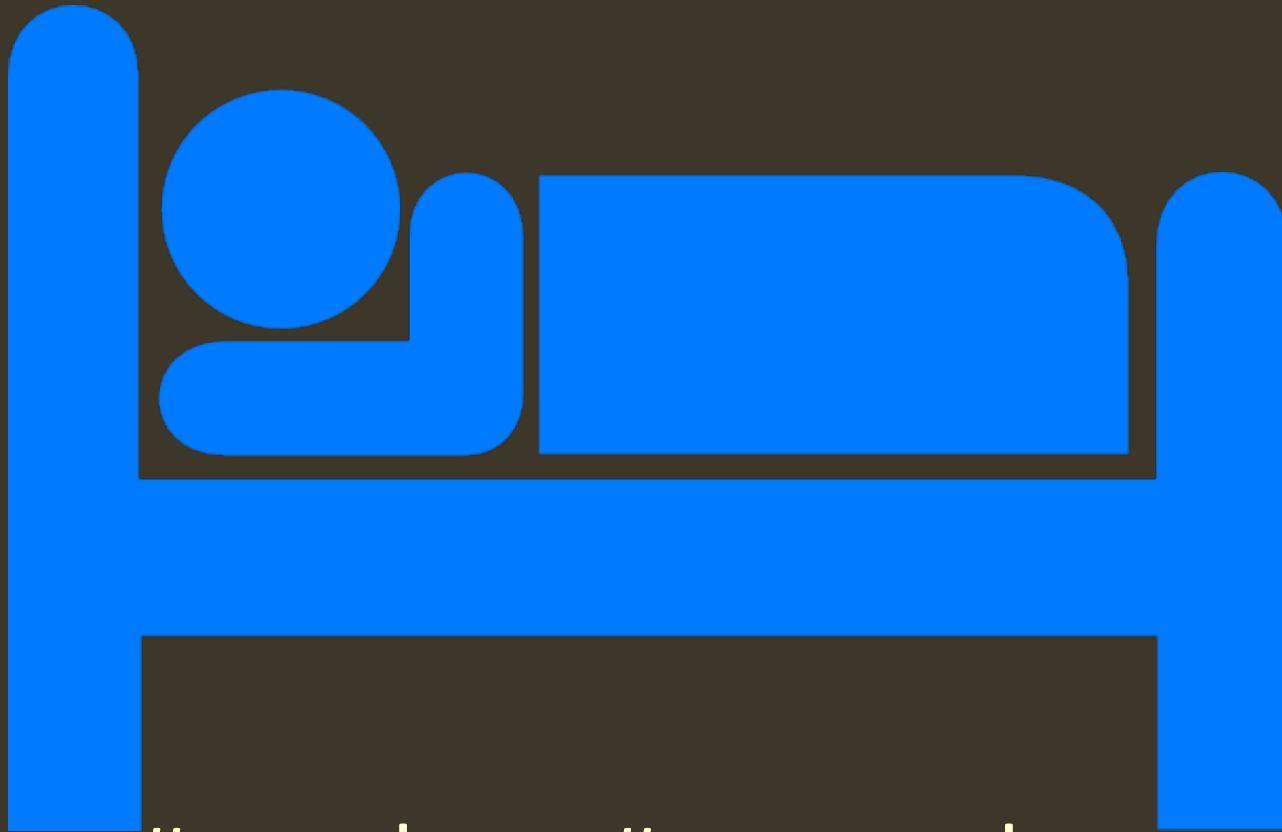
4

2

Your data will get used

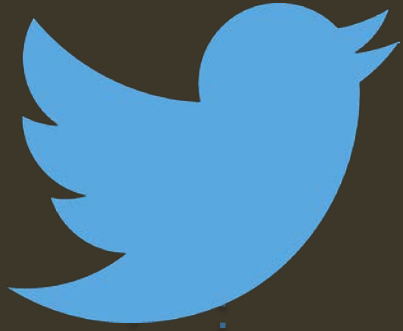
Twitter data may help shed light on sleep disorders

Researchers generate a 'digital phenotype' of Twitter users with sleep problems



#cantsleep #teamnosleep

Google



Open a twitter
account and follow
leaders in your field

Tweet at conferences, tweet about
papers you read, etc.

 @ontowonka  @n_vasilevsky

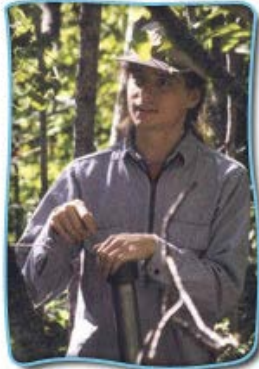


"campbell, jl" and ecology



Scholar

About 2,070 results (0.09 sec)



its

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ice

ents
tions

✉ Create alert

[Post-wildfire logging hinders regeneration and increases fire risk](#)

DC Donato, JB Fontaine, JL Campbell, WD Robinson... - Science, 2006 - sciencemag.org

... However, our data indicate that delay was responsible for ~10% of the woody fuel present after logging. ← JK Agee, Fire **Ecology** of Pacific Northwest Forests (Island Press, Washington, DC, 1993). ... More in Collections. **Ecology**. Related Jobs from ScienceCareers. ...

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[PDF] from humboldt.edu

[Winter in northeastern North America: a critical period for ecological processes](#)

JL Campbell, MJ Mitchell, PM Groffman... - Frontiers in **Ecology** ..., 2005 - Eco Soc America

Ecological research during winter has historically been a low priority in northeastern North America, an oversight that stems from the commonly accepted notion that there is little biological activity when temperatures drop below freezing. However, recent research has ...

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[Can fuel-reduction treatments really increase forest carbon storage in the western US by reducing future fire emissions?](#)

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It has been suggested that thinning trees and other fuel-reduction practices aimed at reducing the probability of high-severity forest fire are consistent with efforts to keep carbon (C) sequestered in terrestrial pools, and that such practices should therefore be rewarded ...

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[Mixed-severity fire regimes: lessons and hypotheses from the Klamath-Siskiyou Ecoregion](#)

JE Halofsky, DC Donato, DE Hibbs, JL Campbell... - Ecosphere, 2011 - Eco Soc America

... Fire regimes—the characteristic pattern and effects of wildland fire in a given area—are major drivers of the **ecology** of many vegetation types and are widely applied as a guiding framework for management of fire-prone ecosystems globally (Bond and van Wilgen 1996 ...

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[Intake, digestibility, and passage of a commercially designed diet by two Propithecus species](#)

JL Campbell, JH Eisemann, KE Glander... - American journal of ..., 1999 - Wiley Online Library

... **Campbell, JL**, Eisemann, JH, Glander, KE and Crissey, SD (1999), Intake, digestibility, and passage of a commercially designed diet by two propithecus ... Though both animals have a similar feeding **ecology**, the captive status of P. verreauxi is considered more stable than that of ...

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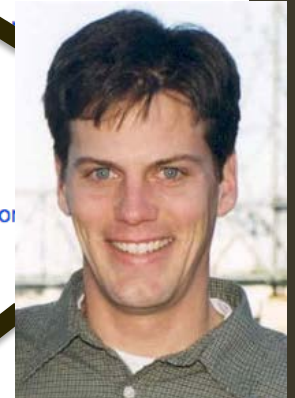
[Dissolved organic nitrogen budgets for upland, forested ecosystems in New England](#)

JL Campbell, JW Hornbeck, WH McDowell, DC Buso... - Biogeochemistry, 2000 - Springer

Page 1. Biogeochemistry 49: 123–142, 2000. © 2000 Kluwer Academic Publishers. Printed in the Netherlands. Dissolved organic nitrogen budgets for upland, forested ecosystems in New England JOHN L. CAMPBELL1, JAMES ...

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and Researchers



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Impact.Story

impactstory.org

=> Rely largely on social network mentions, URLs, and DOIs

**Services to identify yourself and your
impact**

Scientists must share early and share often to boost citations



<http://theconversation.com/scientists-must-share-early-and-share-often-to-boost-citations-18699>

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

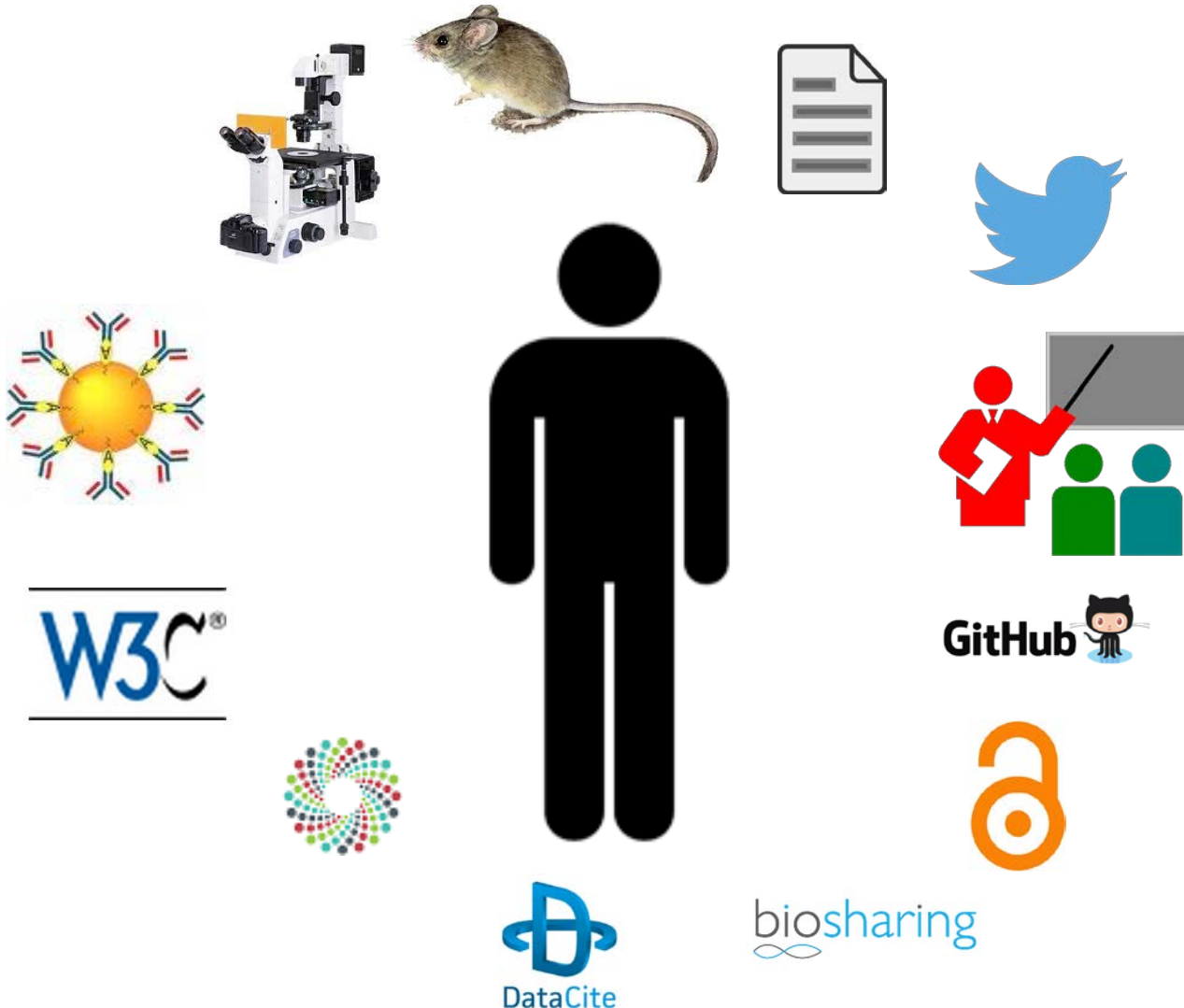
| | | | |
|--|----------------------------------|---|-------------------------------------|
| NAME Melissa Anne Haendel | | POSITION TITLE Assistant Professor, Oregon Health and Science University | |
| eRA COMMONS USER NAME MHAENDEL | | | |
| EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as</i> | | | |
| INSTITUTION AND LOCATION | DEGREE <i>(if applicable)</i> | YEAR(s) | FIELD OF STUDY |
| Reed College, Portland, Oregon | B.A. | 1991 | Chemistry |
| University of Wisconsin, Madison, Wisconsin | Ph.D. | 1999 | Neuroscience |
| University of Oregon, Eugene, Oregon | Postdoctoral | 2002 | Neuroscience |
| Oregon State University, Corvallis, Oregon | Postdoctoral | 2004 | Environmental Health and Toxicology |

A. Personal Statement

My personal career goal is to further the collaboration and connection between the basic science research performed on model organisms and that performed in the clinic. I was originally a basic sciences researcher, utilizing chicken, mice and zebrafish in my research, and these connections were seemingly something to be taken on faith most of the time. My training includes ontology development, bioinformatics, and molecular biomedical research, which are specific areas of expertise that are key for this application. In my graduate work, I gained a broad background of anatomy, histology, and neuroscience, and was doing molecular biology in model organisms when bioinformatics was just becoming commonly computable. In my post-doctoral work, I utilized the zebrafish to examine the role of nuclear hormone receptors during neural development. I also worked on the effects of biocides on early development, and found this project interesting from the perspective of relating to work being done by the EPA and regulation of these compounds. As a scientific curator at the Zebrafish Information Network (ZFIN), I was responsible for the development of data standards and tools in support of the zebrafish as a model system. As nomenclature coordinator, I named genes and organisms and coordinated naming and orthology links with governing bodies of nomenclature for other model organisms and humans. At ZFIN I was also in charge of anatomical and phenotype ontologies for indexing gene expression

Citing products of your research

Credit and expertise are represented by the things that are connected to you

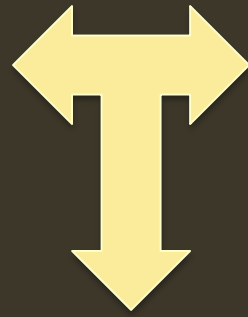




Science Experts Network Curriculum Vitae

**Finally: Federal biosketch
allows inclusion of non-
traditional scholarly products**

Getting a DOI for a dataset or code or other kinds of documents



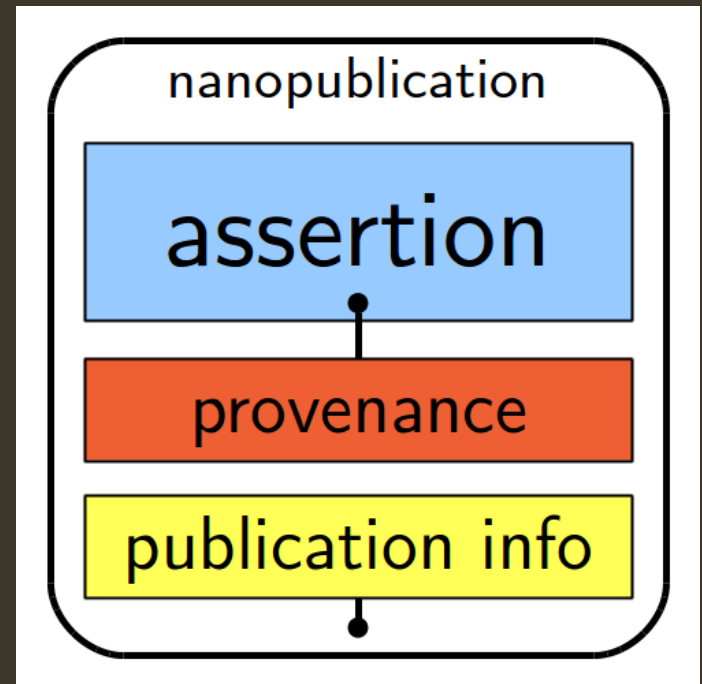
zenodo



<https://guides.github.com/activities/citable-code/>

Can your products be found?

Release early and often



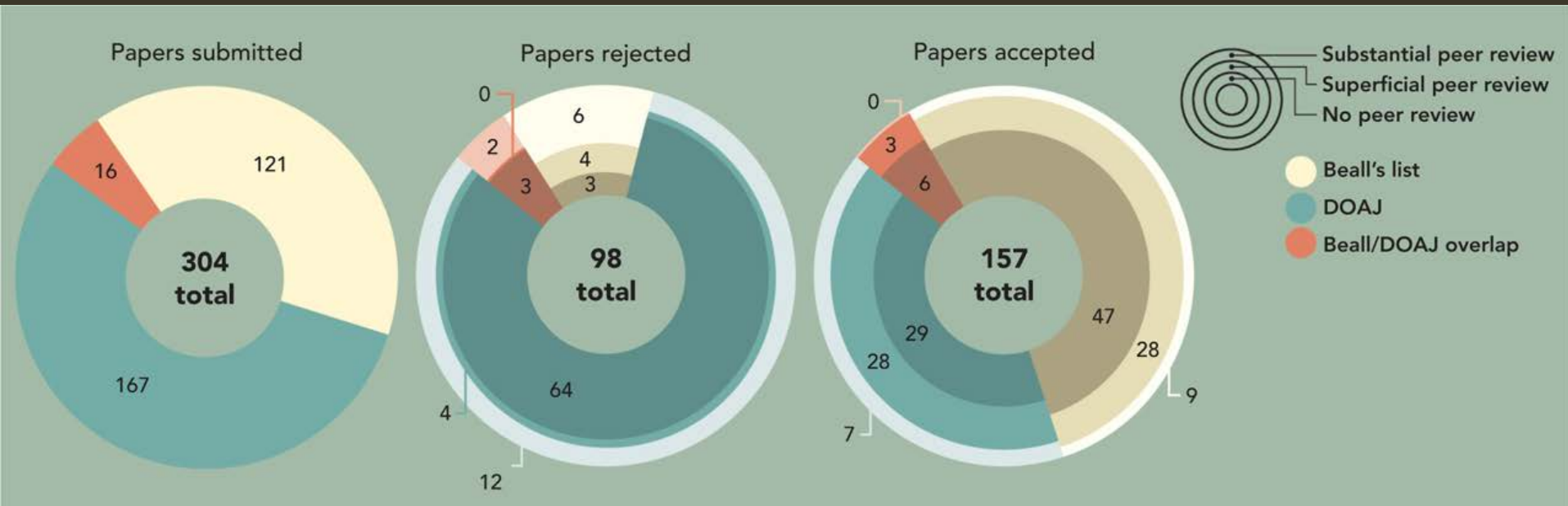
Example here:

http://nanopub.org/wordpress/?page_id=57

Not just your code, your ideas too.

Be careful where you publish

Peer review reviewed. Few journals did substantial review that identified the paper's flaws.



RESOURCES



figshare.com



datadryad.org



thedata.org



n2t.net/ezid



www.dataone.org



data.rutgers.edu/



nature.com/scientificdata/

Data journals and repositories



rubriq.com



thedata.org



Scalar

scalar.usc.edu

Alternative publishing mechanisms



www.wf4ever-project.org



runmycode.org



galaxyproject.org/

Data Analysis Pipeline Reproducibility
Platforms



Questions?