

Specific Challenges with Data Sharing:

A view from **B**asic **E**xperimental
Studies with **H**umans (**BESH**)

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Disclosures

Funding: NIH (NCI, & NEI), NSF

Roles in organizations *for whom I am not speaking*

Past President – Federation of Associations of
Behavioral and Brain Sciences (FABBS)

Editor - Cognitive Research: Principles and Implications
(CRPI) – Psychonomic Society

We were asked for

Three points to take away

So.....

Point One to take away

The behavioral science community sympathizes with NIH goals and concerns about openness. We back data sharing, archiving, reporting, and registering.



Point Two to take away

Wearing my research hat:
The structure of BESH
discovery science does not
fit well with formats like
clinical trials.gov.



Point Three to take away

Wearing my
journal editor hat:

There is a tension
between full reporting
and the desire to
publish science that
moves the field forward.



Let's elaborate:

We will take Point 1 as a given.



Point 2:

The problem: NIH is funding a lot of clinical trials whose results are never published.

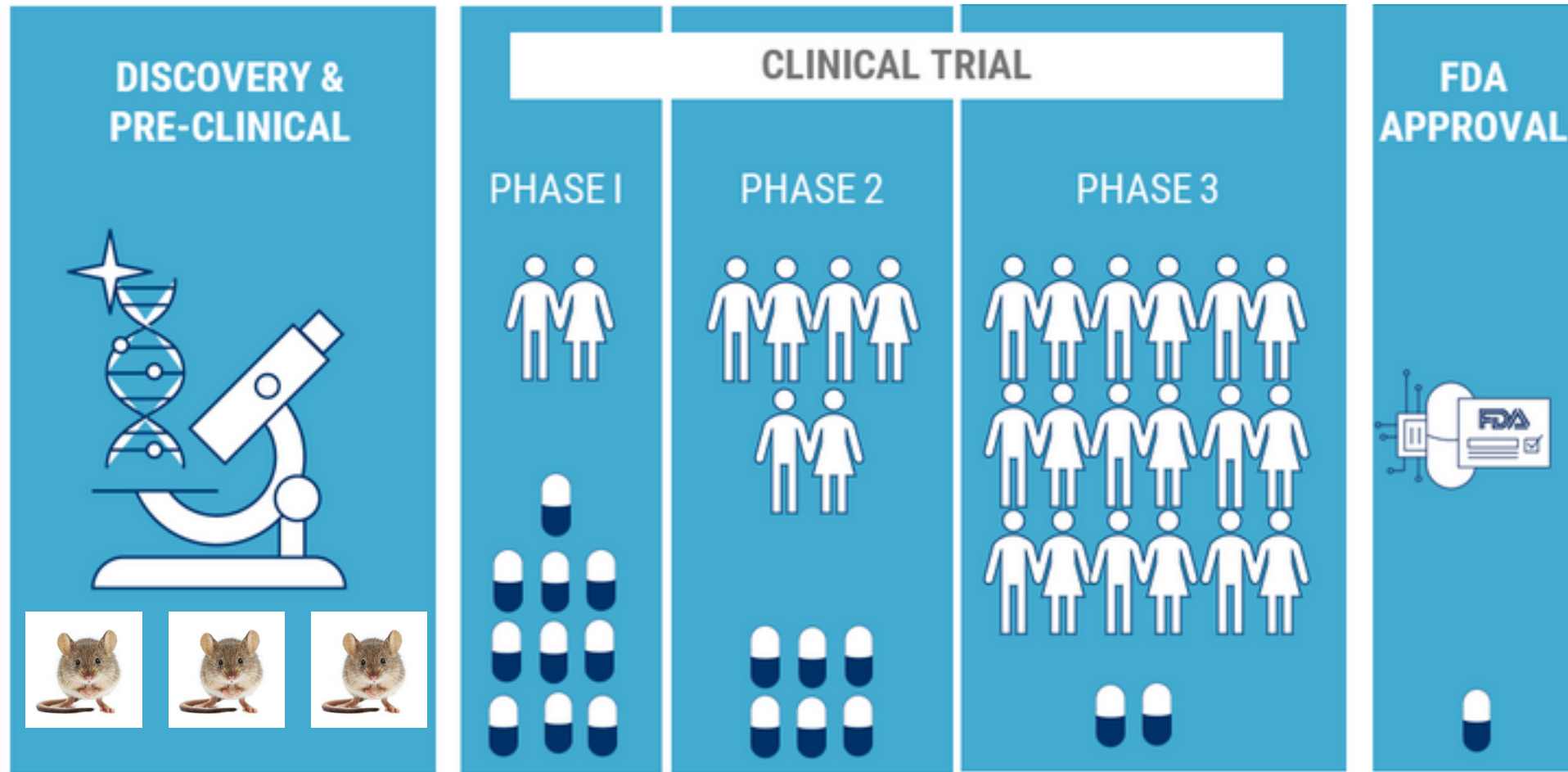


<https://grants.nih.gov/grants/guide/notice-files/NOT-OD-18-217.html>

“ fewer than half of trials funded by NIH are published in a peer reviewed biomedical journal indexed by Medline within 30 months of trial completion. Moreover, after a median of 51 months after trial completion, a third of trials remained unpublished.”

***Ross et al (2012) Publication of NIH funded trials registered in ClinicalTrials.gov: cross sectional analysis
BMJ 344***

What is a clinical trial? (We all know...right?)



NIH decides to round up the wandering sheep



Not our problem

The state of the behavioral
science community



Oh dear, it is our problem.

1.Does the study involve human participants?



2.Are the participants prospectively assigned to an **intervention**?



3.Is the study designed to evaluate the effect of the **intervention** on the participants?



4.Is the effect that will be evaluated a **health-related** biomedical or **behavioral** outcome?



A close-up photograph of a light-colored wooden block standing upright on a wooden surface. The surface is perforated with several circular holes. The lighting is warm, casting soft shadows. A semi-transparent grey box with yellow text is overlaid on the left side of the image.

We believe in registering
and reporting.

What is the problem?

My most recent RO1 contains ~25 “clinical trials” by the NIH definition

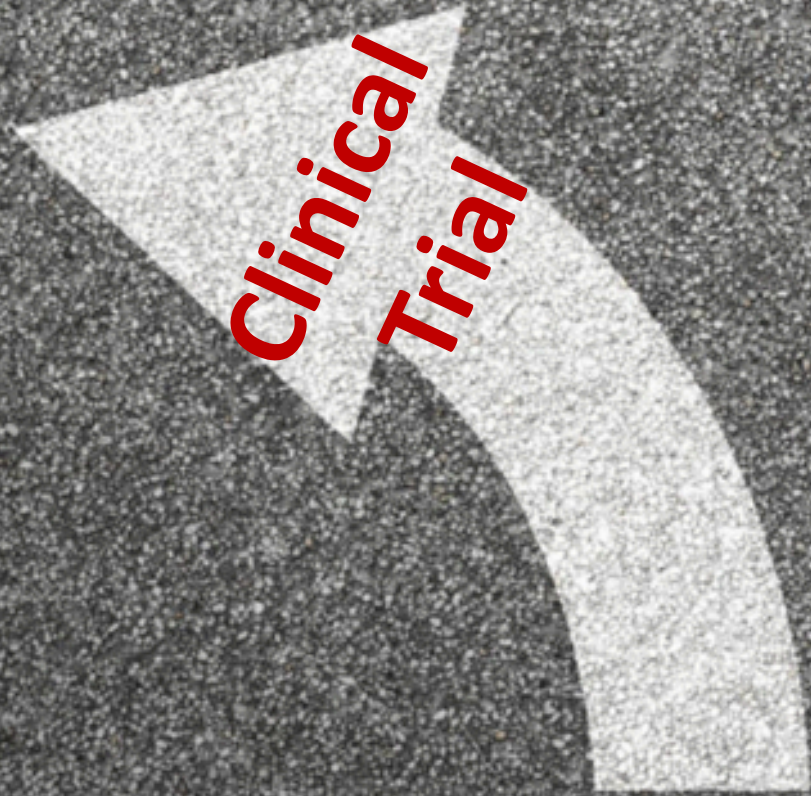




What is the solution?

<https://www.fotocommunity.com/photo/light-at-the-end-of-the-tunnel-ram-ramkumar/38185656>

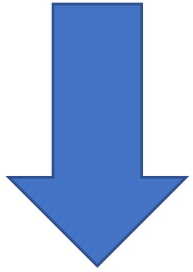
Find a pathway
for BESM
(thank-you NLM)



BESH



Meanwhile, back to this problem



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*Ross et al (2012) Publication of NIH funded trials registered in ClinicalT
BMJ 344*

The file drawer problem

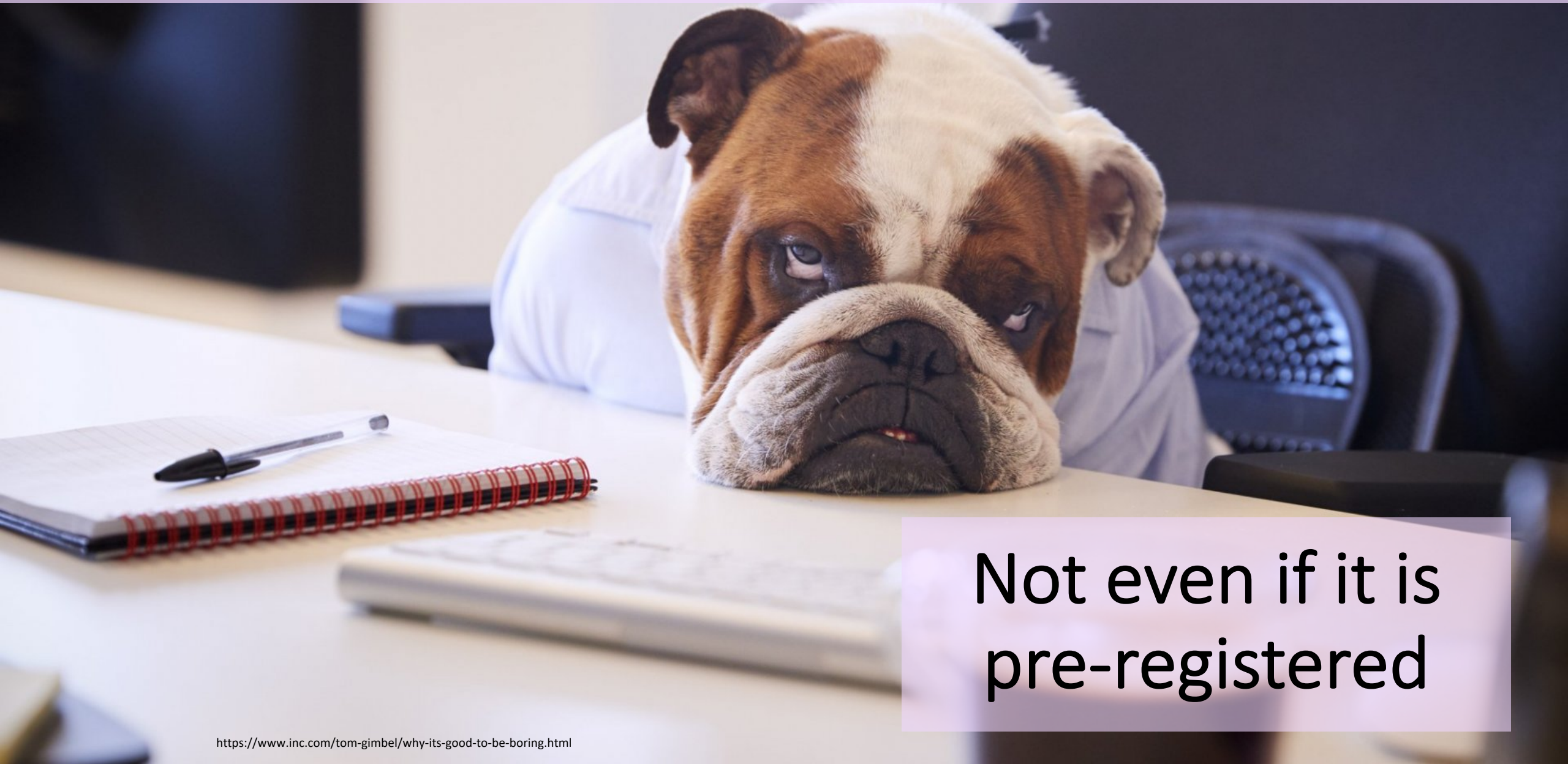


What is the problem?

I do not want your
boring replication,
negative result,
etc, in my journal,



What is the problem?



Not even if it is
pre-registered



What is the solution?

<https://www.fotocommunity.com/photo/light-at-the-end-of-the-tunnel-ram-ramkumar/38185656>

A solution for discovery science (*BESH et al*)



Register *any* experiment
that might be publishable

A solution for discovery science (*BESH et al*)

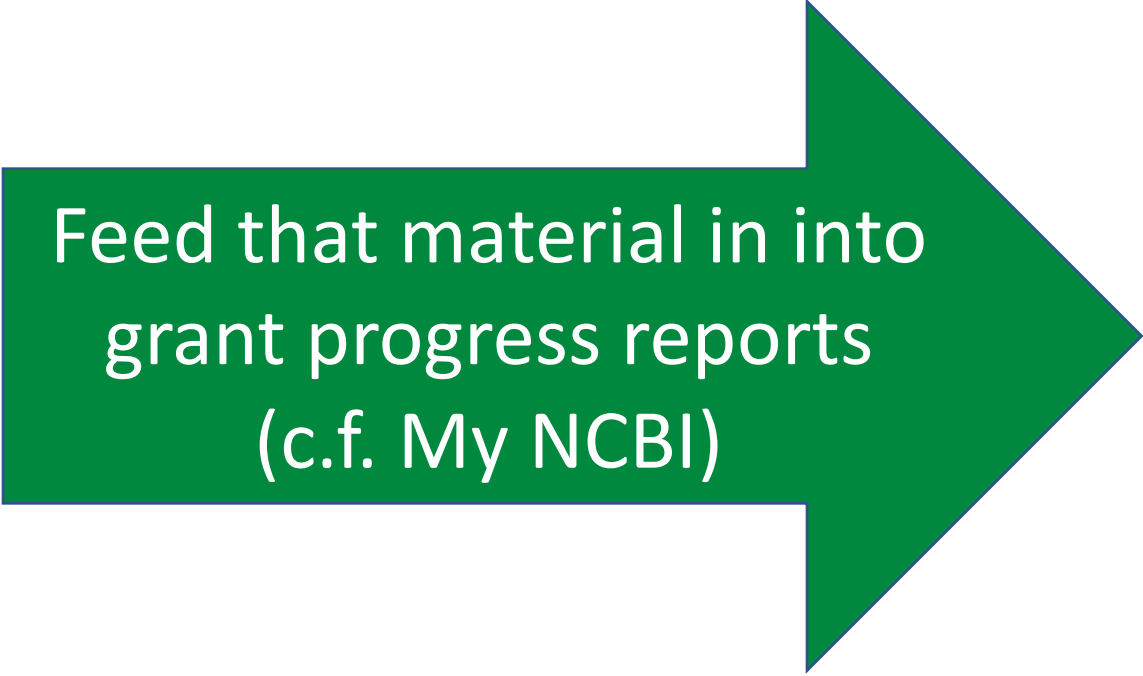


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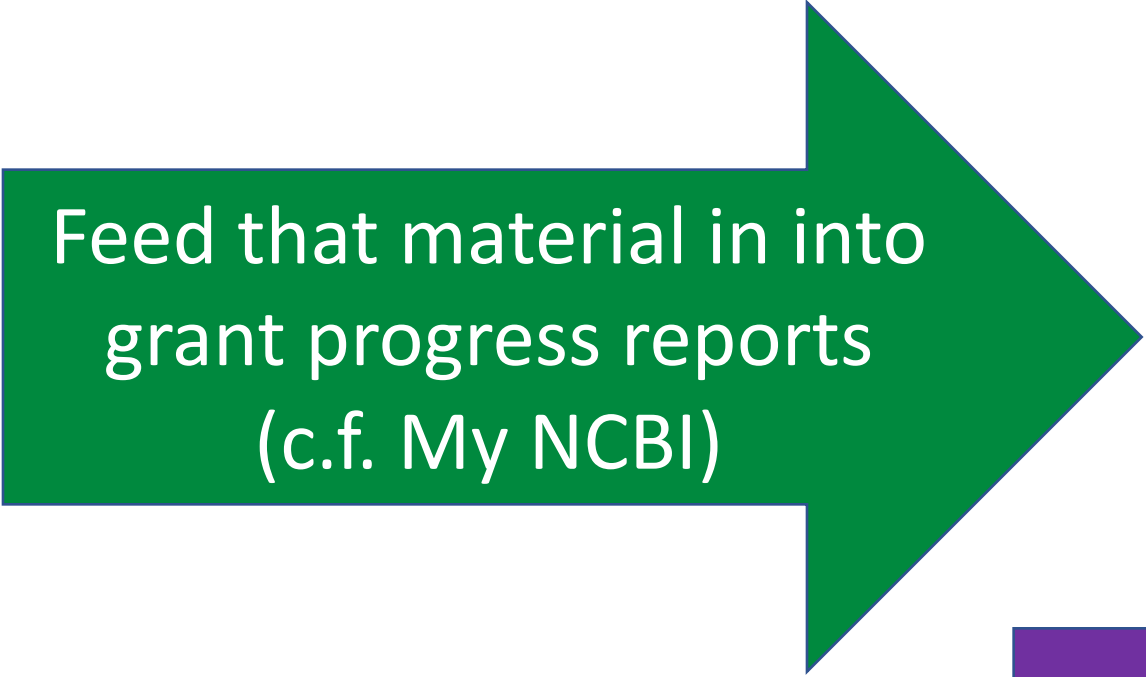
When the experiment is
done, add a results report
to the registration.

A solution for discovery science (*BESH et al*)

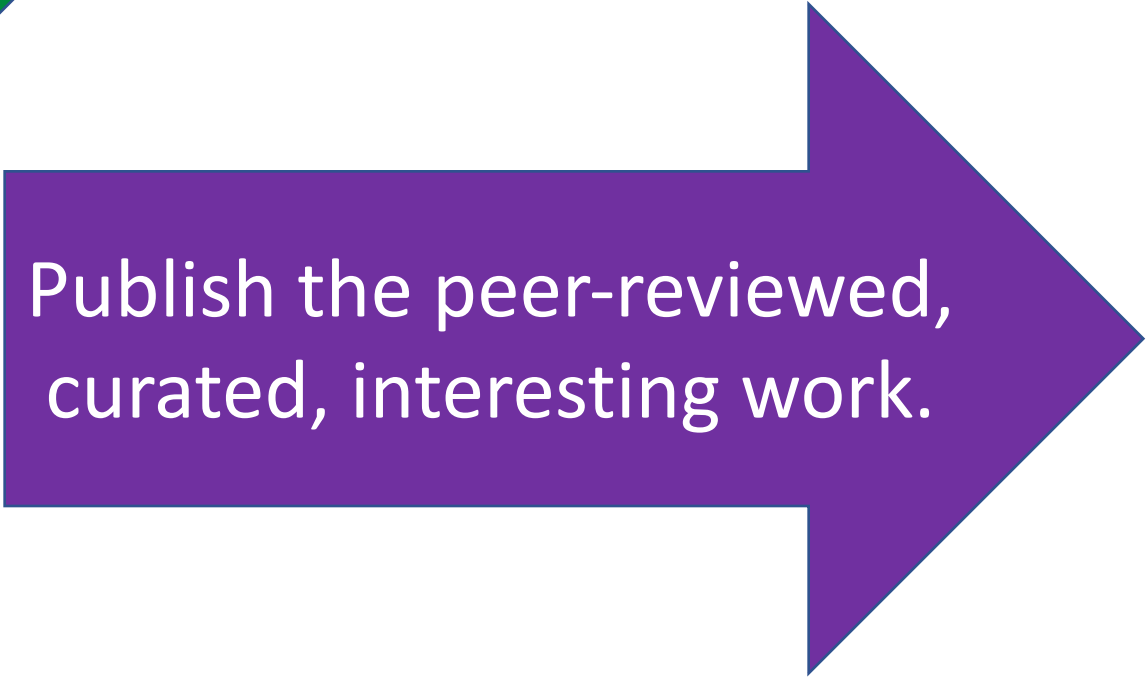


Feed that material in into
grant progress reports
(c.f. My NCBI)

A solution for discovery science (*BESH et al*)



Feed that material in into
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Publish the peer-reviewed,
curated, interesting work.

Onward to the promised land

Thank-you

