How HHMI Evaluates Science

Bodo Stern Howard Hughes Medical Institute

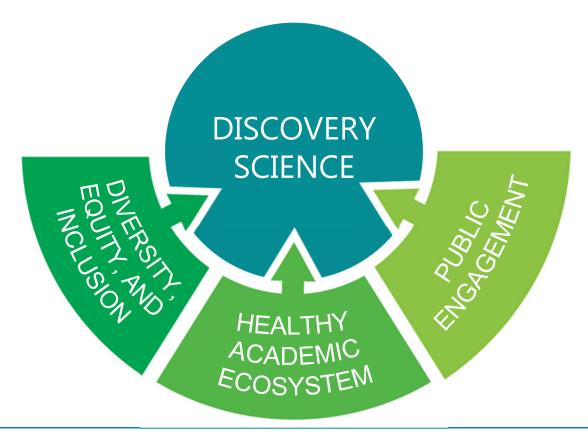
Keynote Presentation

Driving Institutional Change for Research Assessment Reform

October 21, 2019



HHMI's Priorities





Driving Institutional Change for Research Assessment Reform

How can we improve how scientists and scientific work are evaluated, recognized, and rewarded?

How can we diminish the corrosive influence of journal names and metrics in research assessment?





Peer review meeting in 2018





Current challenges with assessment

- Corrupting incentives: scientists are evaluated based on where they publish, not what they publish.
- Lack of transparency and accountability: results of peer evaluation are not made available to inform assessment by institutions or funders.
- Lack of credit: scientists do not receive discoverable credit for their contributions (for example, as collaborators, creators of datasets & software, or as peer reviewers).



Future of scientific communication and assessment

Autonomy and recognition for researchers

Authors share; Credit is assigned based on individual contributions Open Science

Open Access; Unique identifiers for all outputs Transparent evaluations of scientific work

Contribute to institutional assessments



People, not projects

- to enable creative scientists to follow their curiosity
- to promote discovery science for long-term impacts on scientific progress









HHMI Investigators work at host institutions across the US.



HHMI expects its Investigators to achieve some combination of the following:



Pursue rigorous & deep biological studies



Forge links between basic biology and human health



Lead research fields into new areas of inquiry



Demonstrate promise of future contributions



Develop innovative tools and methods



Actively serve and train at host institutions and in community



The HHMI review process

Reviewers	Materials	In-person meeting
Respected leaders	Research report	Presentation on accomplishments
Long-serving and		& future plans
ad hoc experts	Five most significant	Q & A
Advisors, not deciders	papers (incl. preprints)	Deliberations
not decident	Montarabin 9	
Internal evaluation of reviewers	Mentorship & community activity	HHMI leadership makes decision







What counts in HHMI assessment

What counts

- Expert advisors
- 5 critical articles
- Past accomplishments

What doesn't

- Number of papers
- Publication venue
- Research \$

"Deletion test"



Learning from the HHMI process

Consider elements of HHMI's process for promotion and tenure review, for example the focus on a few research articles.

We share our review process here:

hhmi.org/programs/biomedical-research/investigator-program/review



