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# Data & Partnerships at Fred Hutch

Carly Strasser, PhD | @carlystrasser  
Fred Hutchinson Cancer Research Center

NCI Symposium on Personal Control of  
Genomic Data for Research  
September 2019



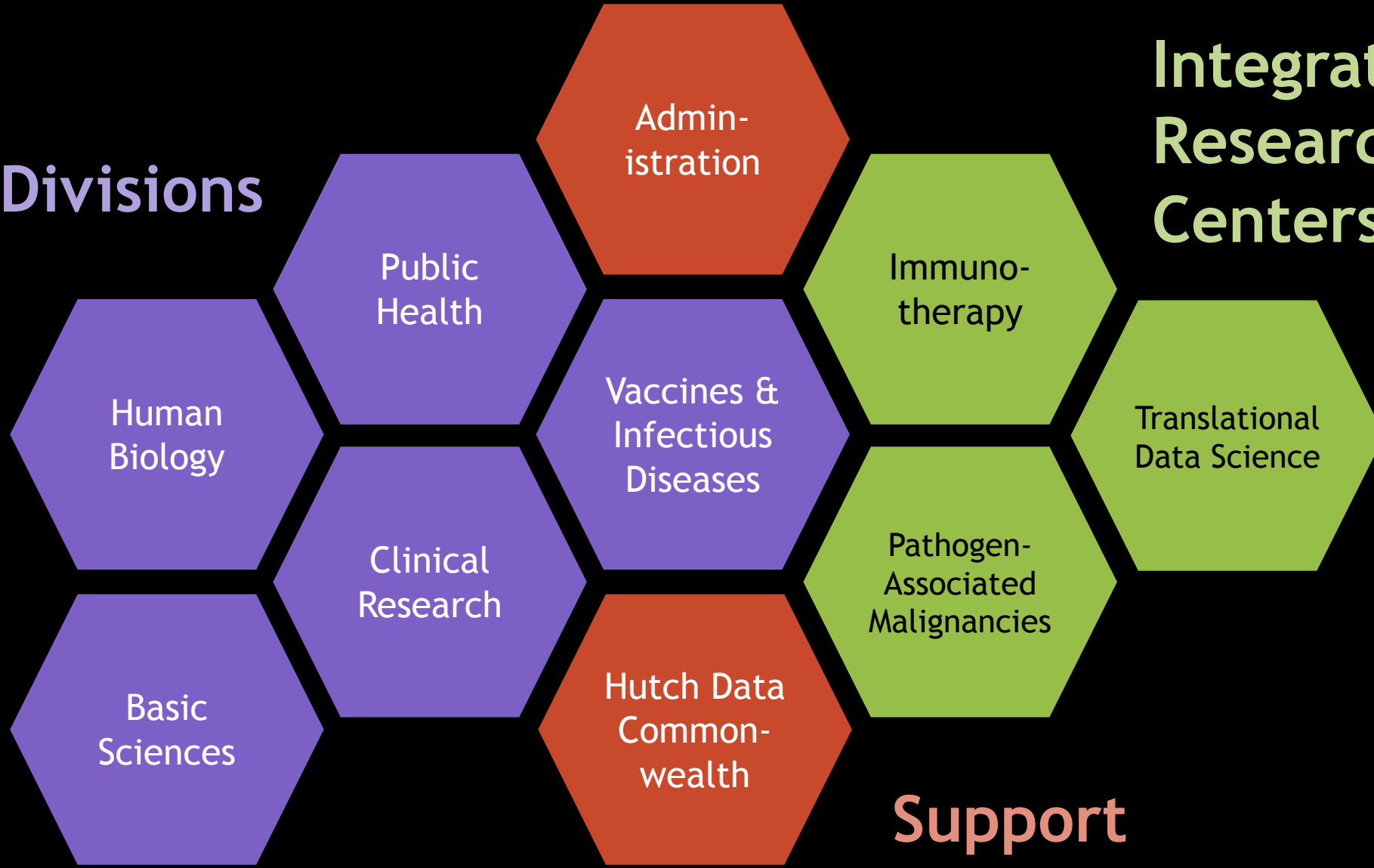


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- NCI Comprehensive Cancer Center
- Part of Seattle Cancer Care Consortium with University of Washington, Seattle Children's, Seattle Cancer Care Alliance
- 2,000 employees
- 238 faculty members
- Pioneered bone marrow transplants

## Divisions



## Integrated Research Centers

## Support

# Hutch Data Commonwealth (HDC)

Scientific research has changed dramatically in the last 15 years

Hutch leadership recognized this and established IRCs & HDC

HDC helps build data-intensive research capabilities  
through  
software & data engineering | training | partnering

# Researchers fall on a spectrum

Less data savvy

More data savvy



Training  
Consulting  
Collaborations & partnerships

# Research falls on a spectrum

Less data

More data



More power  
More relevance

Public databases  
Data sharing  
Collaborations & partnerships

# Data Commons

Data commons collocate data, storage, and computing infrastructure with core services and commonly used tools and applications for managing, analyzing, and sharing data to create an interoperable resource for the research community.

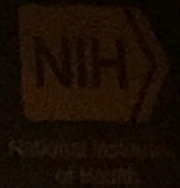
Bob Grossman

Public databases  
Data sharing  
Collaborations & partnerships

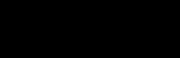
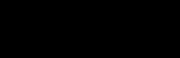
**WWLD: What would Lin do?**  
Governing the Commons



Robert Cook-Deegan, MD,  
Arizona State University



National Institutes  
of Health



1 H	6 C	7 N	8 O
2 He	18 Ar	11 Na	15 P
20 Ca	54 Xe	110 Ds	29 Cu

# DCPPC

DATA COMMONS PILOT PHASE CONSORTIUM



Matthew Trunnell,  
CDO at Fred Hutch

Let's start  
local!



Matthew Trunnell,  
CDO at Fred Hutch





Regional data sharing ecosystem

Research  
organizations  
+  
Tech companies



Hypotheses:

- Proximity matters
- Start with metadata



UW Medicine



UNIVERSITY of WASHINGTON  
eScience Institute





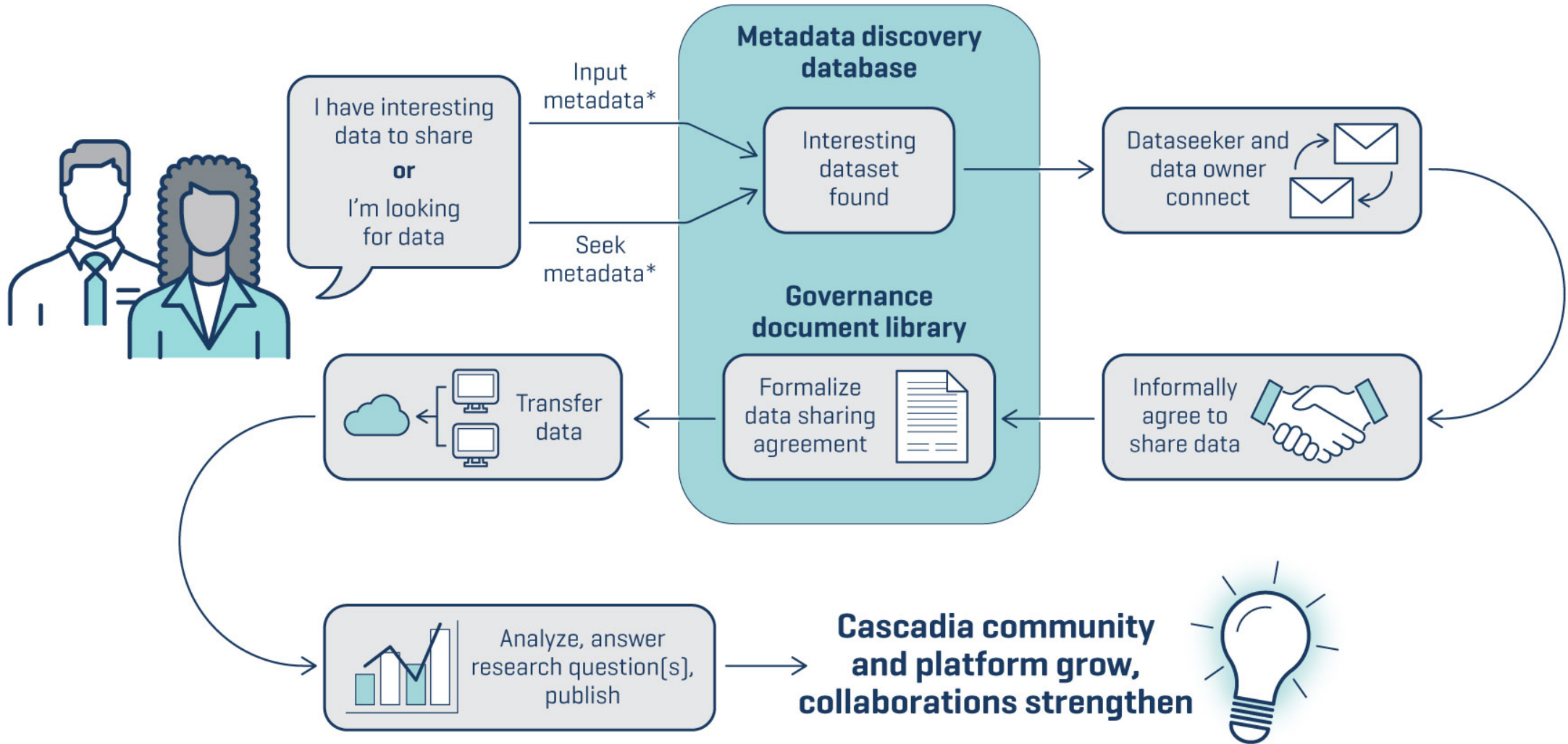
Three areas of focus

Technology

Governance

Community

# CASCADIA PLATFORM



\*metadata-descriptive info about dataset[s]

Synthetic data

Differential privacy

Subscribe to a data search

Metadata gamification

# Research data sharing is hard.

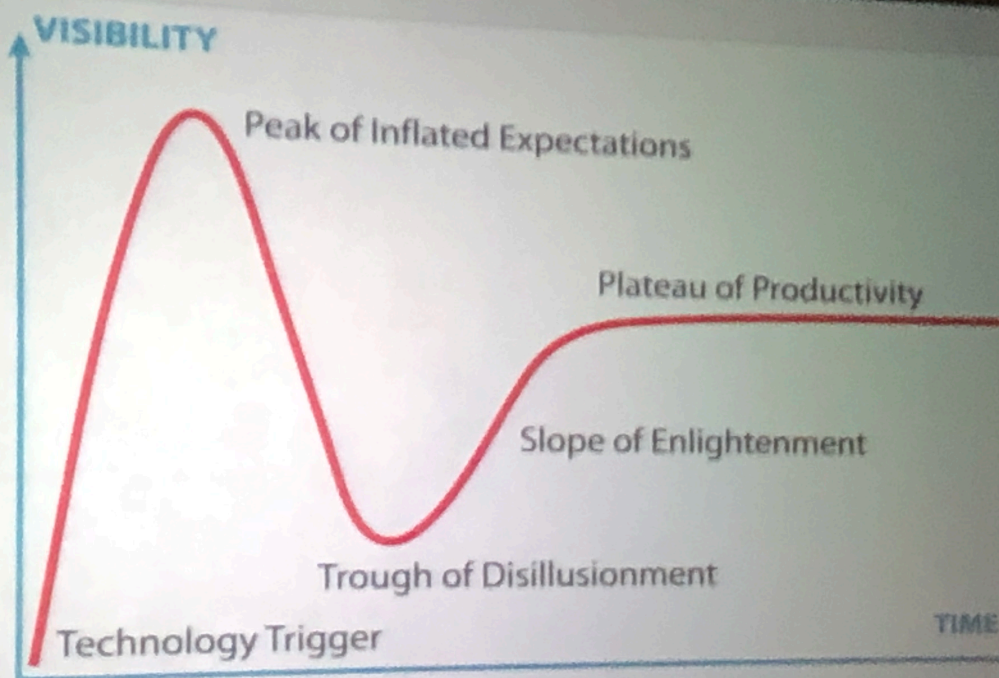
Privacy and security concerns

Interoperability challenges

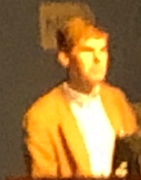
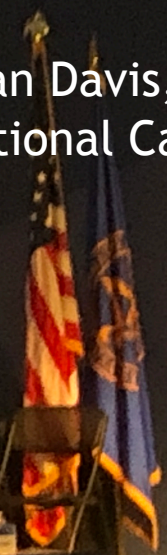
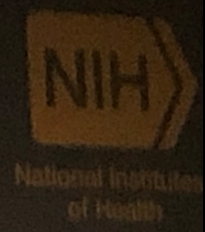
Lack of knowledge & skills

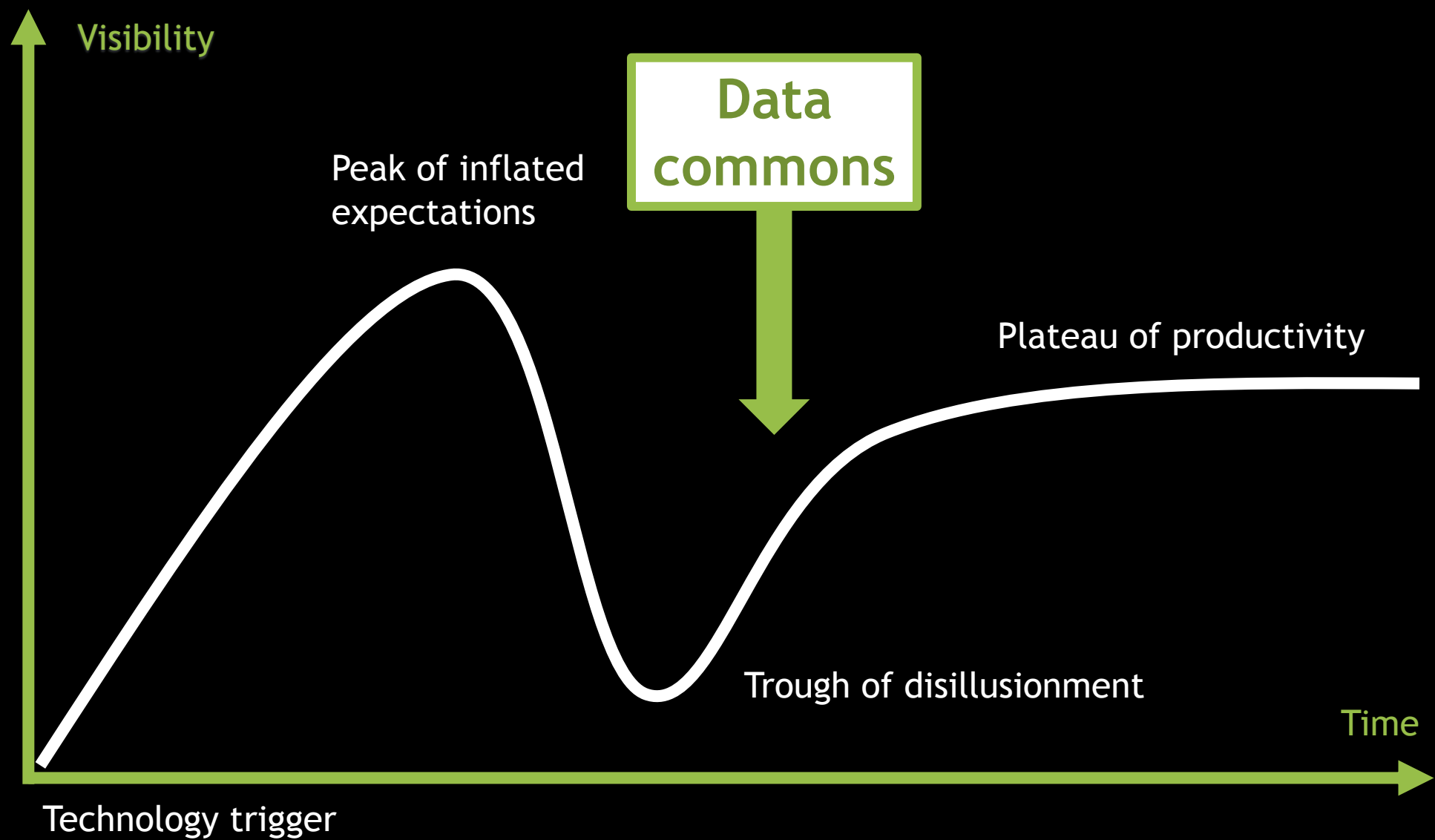
Time consuming

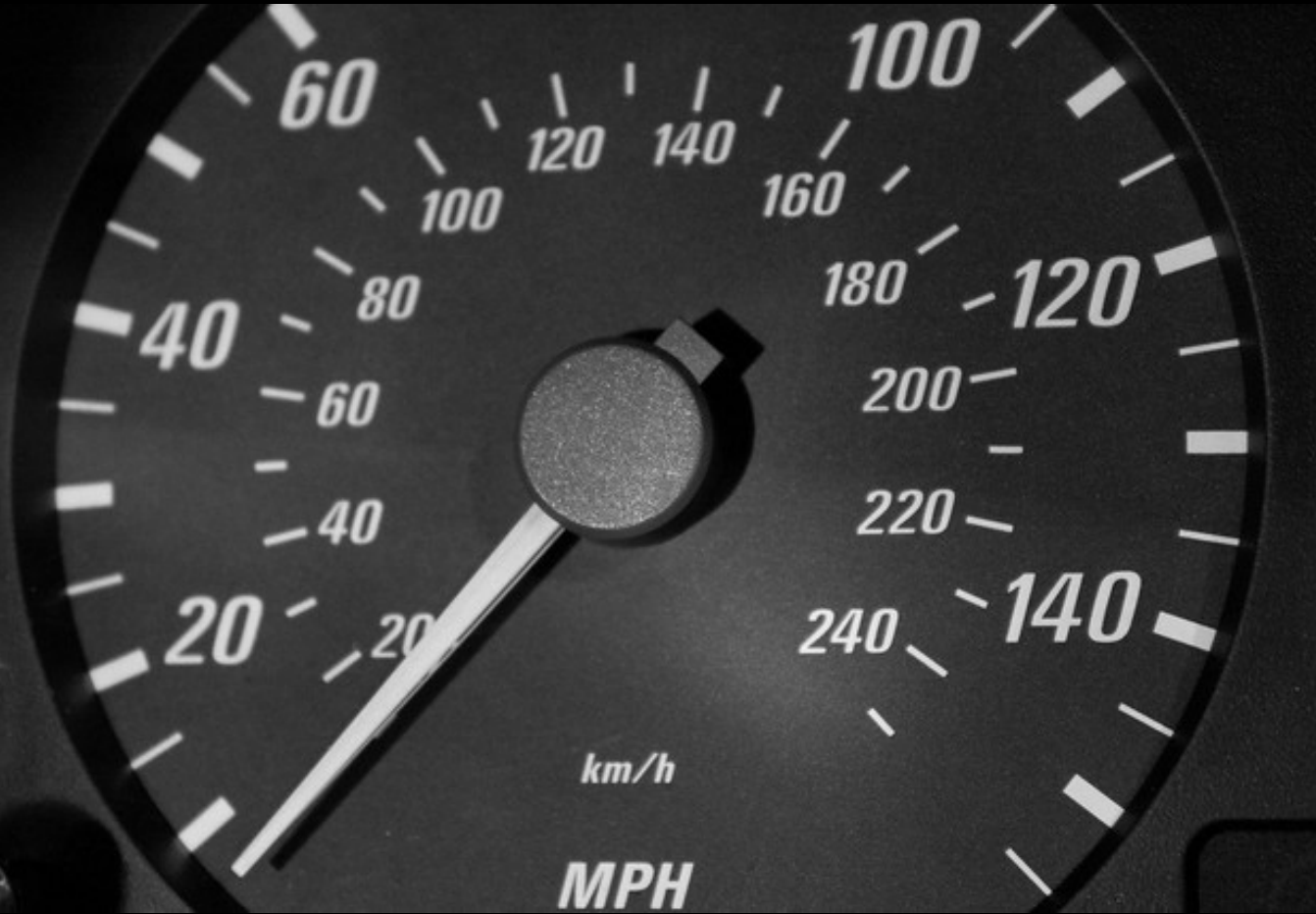
Few professional incentives



Sean Davis, MD, PhD  
National Cancer Institute







Open science &  
data sharing  
**accelerates**  
research

# Why Fred Hutch President Gary Gilliland is enlisting techies to defeat cancer by 2025

BY **ALAN BOYLE** on September 26, 2017 at 8:26 am

2 Comments

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1,923 Days



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Thank you!