



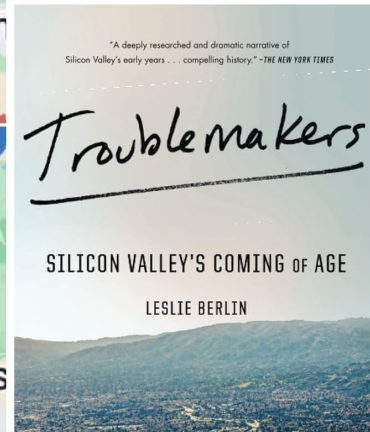
National Nanotechnology Coordinated Infrastructure

Special Topic: Translating from R&D to Market and the I&E Economic Impact Survey Results

2:00 - 4:45PM PT , Thurs Oct. 26, 2023

Matthew Hull, PhD
NNCI AD, Innovation &
Entrepreneurship
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A Tale of Two Valleys - **Silicon Valley** of Death



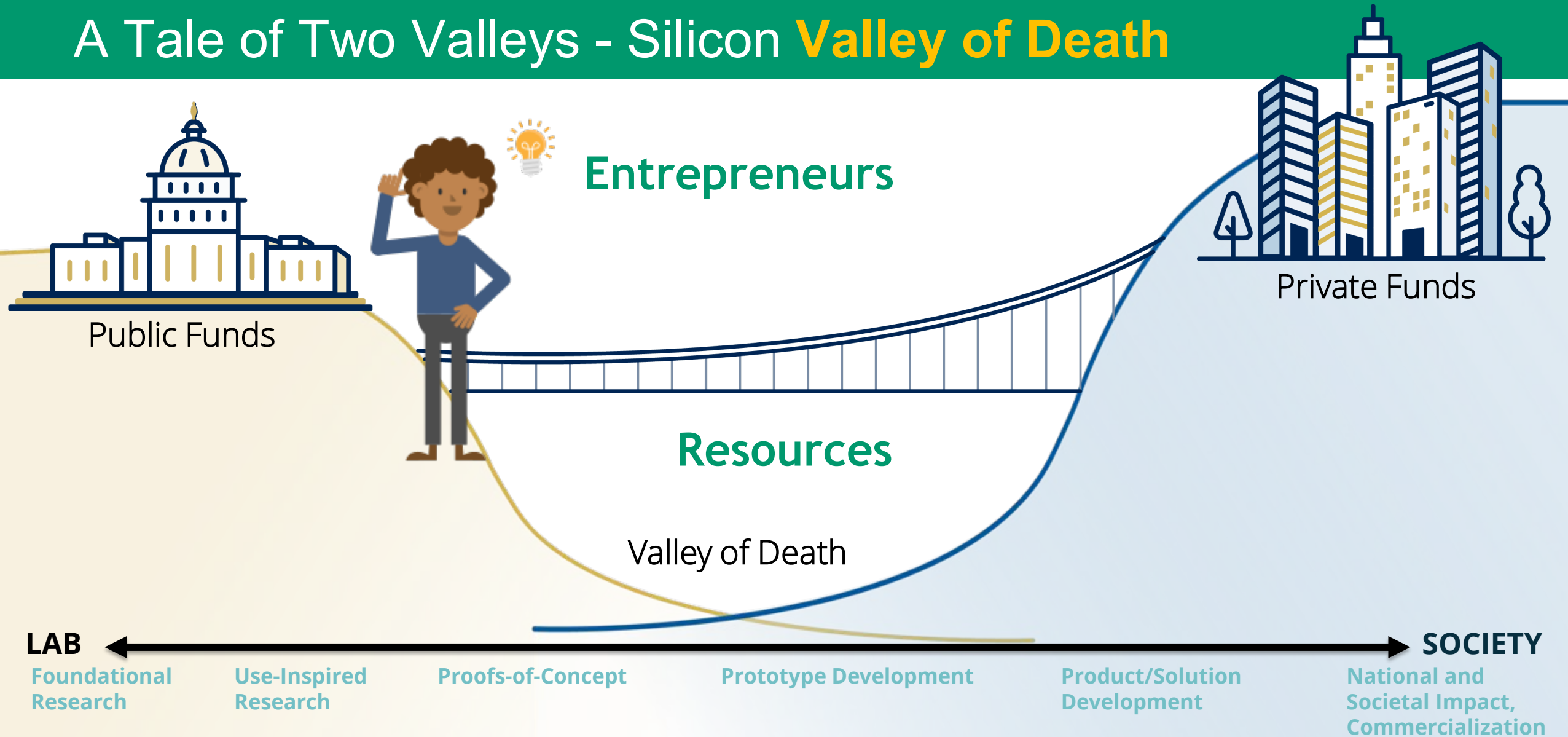
“most significant and diverse burst of technological innovation of the past 150 years.”

Within “35 miles and seven years...the microprocessor, the personal computer, and recombinant DNA.”

Entrepreneurs founded: Apple, Atari, Genentech...pioneering VC firms

Five major industries born: personal computing, video games, advanced semiconductor logic, **modern VC**, biotechnology

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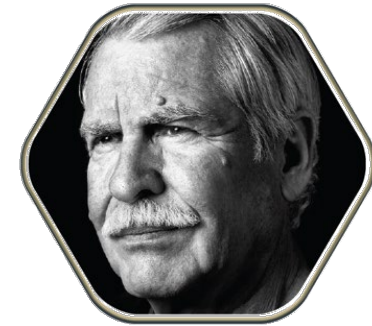
Session Objectives

- **Entrepreneurs:** Share **examples of companies** using NNCI facilities to translate nano-enabled products/services to the market
- **Resources:** Highlight **existing and new resources** for translating nano R&D to market
- **Future:** Envision **how the NNCI can most effectively support** translating R&D to market both now and in the future

NNCI Economic Impact Survey – 10 Years After NNIN



Updated economic impact survey based on the original NNIN survey



Kurt Petersen
NNCI AB
Silicon Valley
Band of Angels



Jessica Hauer
NCI-SW



Tonya Pruitt
NanoEarth



Yves Theriault
SDNI



Phillip Strader
RTNN

Image credit:

<https://www.ntaskmanager.com/blog/project-design-in-project-management/>

Special thank you to those who
volunteered to lead this effort



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Panel Discussion about Translation

4:00 - 4:45PM PT , Thurs Oct. 26, 2023

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Question 1

Reflecting on your journey translating nano R&D to market, consider the following:

- a. What resources and programs were most impactful on your success (or the success of start-ups you supported)?
- b. How important was the NNCI to your success (or the success of start-ups you supported)?
- c. What was missing and what could be done to better to support R&D translation?

Question 2

How could a future nanotechnology infrastructure network best support technology translation, IP generation, and entrepreneurship at a regional and national scale?

- a. Beyond lab equipment and facilities, what barriers prevent the transition from R&D to market?
- b. Should a future resource provide mid-scale manufacturing capabilities, either in-house or through partnerships?
- c. How could infrastructure resources be better integrated with larger translational programs, such as NSF I-Corps and regional innovation engines?
- d. What resources should a group of shared facilities provide to facilitate IP generation and entrepreneurship?

Potential Follow-Up Questions (Time Permitting)

- a. Translation resources and NNCI resources are separate things. Could our user community benefit from better integration of those resources? Do you have suggestions for how we might better integrate a future network and translation resources?
- b. Did you find it difficult to navigate the lab-to-fab transition? Would it help other entrepreneurs if a network could provide guidance for a clearer translation pathway?
- c. When it comes to translating nano-enabled discoveries to the market, do you feel like we could improve on the NNCI resources you interacted with or the business development resources? (HR, finance, legal....)
- d. What can the NNCI do now and over the next two years to better enable nanotechnology translation? What role should translation support have in a future network?