

# Activate

---

## About Us

July 2022

## Executive Summary

- Activate seeds new ventures into the early-stage innovation ecosystem
- Focus on eight industries to address global challenges
- Two-year entrepreneurial fellowship funded by .gov and .org
- 142 Activate Fellows across eight cohorts
- Founded in 2015 as a 501(c)(3) non-profit to support Cyclotron Road
- Fellow communities in Berkeley, Boston, New York, and across the U.S.



# The world needs scientists, now more than ever.

For humanity to thrive in the face of climate change and other global challenges, we need to reinvent our economy to be sustainable, resilient, and equitable.

To do that, we'll need scientists to bring their groundbreaking research to market as new products and businesses faster and with more impact.



## Time & Funding

### A Two-Year Fellowship

- Fellows turn research into a first product and secure financing
- \$80K-\$110K/yr stipend, plus travel allowance, health insurance
- \$100K in R&D funds
- Access to at least \$100,000 in additional flexible capital



## An Expert Community

### Advisers, Partners, and Champions

- The Activate Fellowship team and managing directors
- An unparalleled network of scientists, engineers, technologists, and entrepreneurs
- A vibrant fellow community

## World-Class Tools for Scientists

### World-Class Research Labs

- Hard-to-access facilities
- Work with experts and facilities while retaining IP rights

### Entrepreneurial Education

- Regular guests
- Custom-built curriculum
- Intensive mentorship, workshops, virtual classes, and professional development services



**Our Mission**



**We empower scientists to reinvent the world by  
bringing their research to market.**

# The Activate Fellowship is a proven path for science entrepreneurs to move their breakthrough research into the market.



## ACTIVATE FELLOWSHIP

Our two-year fellowship empowers the most promising science entrepreneurs to transform their research into products that can benefit society.

### KEY FELLOWSHIP PARTNERS



NYSDA  
Supported



## ECOSYSTEM OF EARLY-STAGE INNOVATION

Nearly all Activate Fellows receive follow-on financing from corporate, venture, or government partners to bring their products to market.

### KEY FOLLOW-ON FUNDING PARTNERS



## The Activate Fellowship works.

Since 2015 our **142 Activate Fellows** have created **106 science-based companies**, some of which will go on to change the world.

**\$860<sub>M</sub>**  
in follow-on  
funding

**\$3.6M** average follow-on-funding  
cohort companies raised during  
fellowship

**17.9x leverage** on every dollar spent  
to support the fellowships

**>700 new jobs** created in the U.S. by  
Activate Fellows



SELECT ACTIVATE FELLOWS

## First Products and Milestones

To date, nearly half of all companies started by Activate Fellows have reached a first product. These early proof-of-market milestones signal the shift to a maturing product-driven company.



**MANUFACTURING:** Resonant Link is bringing wireless charging to electric fleets, but its first product is a wireless charger for medical implants.



**POWER:** CEO Andrew Ponc reveals the highest efficiency solid state TPV heat engine (> 33%) ever measured.

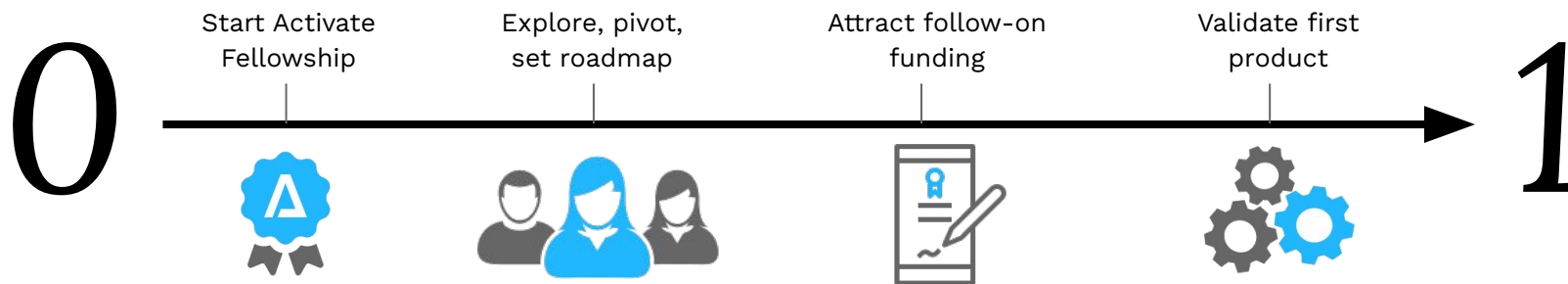


**AGRICULTURE:** CTO Kevin Kung developed a decentralized waste biomass-to-fertilizer platform for carbon negative precision agriculture.

## Seeding Entrepreneurs: The Activate Transformation

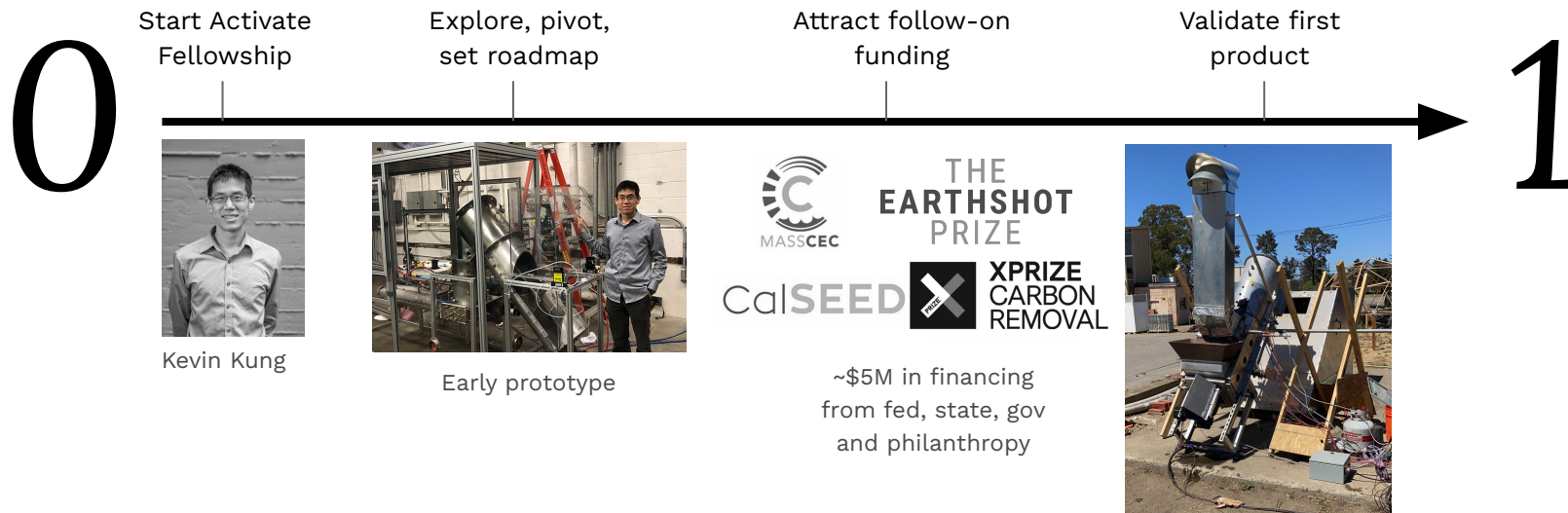
The US government spends \$70B every year creating academic scientists, and the private sector spends \$120B every year scaling early businesses. Activate works between government and the private sector, transforming scientists into high-impact entrepreneurs through a fellowship experience that guides them along every step of the journey. Without us, these entrepreneurs and their companies simply wouldn't exist.

### The Zero-to-One Journey



## Case Study: Takachar

**Takachar is economically turning residual agricultural and forest biomass into useful products.** Its small-scale, low-cost, portable systems latch onto tractors and pickup trucks, providing a new revenue stream for farmers, supporting food production, and mitigating climate harms from burning. At scale, Takachar could mitigate more than one gigaton of carbon dioxide equivalent annually.





## Born from the U.S. National Labs

Founded in 2015, Activate partners with U.S.-based funders and research institutions to support our fellows. Activate's entrepreneurial fellowship model originated at Cyclotron Road, a division of Lawrence Berkeley National Laboratory and founding Activate partner.

### Stage 1

#### **2015: The Experiment**

With Cyclotron Road (a division of LBL), we identified a gap in the science-to-market ecosystem and launched an experiment with a new model of innovation.

### Stage 2

#### **2019: Proving the Fellowship**

Four cohorts later, we began to scale, launching Activate Boston and proving out that fellowships for scientists on a mission can work outside our first community..

### Stage 3

#### **2021: Expanding our Reach**

With the fellowship model proven, we're now supporting fellows across the country and developing additional ways to support our fellows.

# ΔActivate

**A network of the world's top scientists distributed across four communities in partnership with the world's top research institutions.**





**We are focusing our efforts in three areas where we believe our work will have the most impact.**



**Climate Change**

the defining scientific challenge of our time



**U.S. Innovation Ecosystem**

the world's best environment for science entrepreneurship



**Diversity, Equity, Inclusion**

the greatest opportunity to empower scientists and engineers

## Intimacy at Scale

We have dedicated ourselves to supporting Activate Fellows throughout their journeys, building an organization designed to help drive impact whenever and however needed.

And if we can't help, we know someone who can.



# A National Ecosystem at Work



## Academia

National labs and universities provide the backbone of our fellowship, yielding immense opportunities for scientist-turned-entrepreneurs to find product-market fit for their scientific discoveries.



## Government

Agencies charged with setting long-term investment strategies, aligned with federal or local interests, work with Activate to increase the size of high-risk, high-reward markets.



## Corporations

Activate connects startups to the private sector. Corporate partners and investors can propel a new venture's early growth into the market.



## Philanthropy

World-class foundations partner with Activate to advance their missions around climate, energy, science, and environment by catalyzing their capital into growing our fellows' companies.



## Critical Role of Government

- Early investments by federal agencies such as NSF and DOE (e.g., I-Corps and the Lab-Embedded Entrepreneurship Program) have shown tremendous success in supporting entrepreneurs
  - a. Activate has also leveraged critical support from state agencies like California Energy Commission and New York State Energy Research and Development Authority
- Given increasing global competition and major investments in clean energy research in the bipartisan infrastructure package, annual appropriations bills, and proposed in the innovation package, it is clear these activities need to be scaled up to meet the moment and NSF and DOE are well positioned to do so
  - a. NSF and its new TIP Directorate
  - b. DOE Foundation currently proposed in the innovation package
- As we build toward these new and exciting avenues for federal support for startup growth in critically important sectors, we must also preserve the important tools we have
  - a. SBIR/STTR reauthorization facing a potential lapse and is in danger of expiring if Congress doesn't come up with a compromise by the end of September

## Summary

Invest in **people** and provide education, time, and tools for them to grow into leaders & operators.

Shared **community** of hard-science entrepreneurs, mentors and MDs who can provide guidance. Alumni serve as fantastic advisors and local cohorts learn & grow together.

Strong **partnerships** with innovation ecosystem including government, universities, investors, corporations and other accelerators and programs that can further support company development.

Serve our Fellows and act as a bridge from basic science to first markets and pilots. We've taken **142 scientists from zero to one, helping them start 106 impactful companies.**



*“My company would not exist without the support of this fellowship.”*

*Sarah Richardson*

**CEO, MicroByre**

Activate Fellow Cohort 2017



# Activate

**For scientists on a mission.**



[@activatefellows](#)