

BIOSCIENCE INDUSTRY UPDATE

LOS ANGELES COUNTY

APRIL 2018

Bioscience: Background

In 2015, the County Board of Supervisors made economic development a priority to stimulate regional job growth and lift residents out of poverty. Seven industries were targeted based on their proven ability to create jobs and wealth.

Bioscience is the first of the industry sectors selected by the County for focused support.



Health Care
Services



Manufacturing



Trade & Logistics



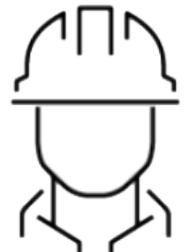
Leisure &
Hospitality



Entertainment &
Tech



Bioscience



Construction

Bioscience: LA County Perspective



The Los Angeles region generates cutting edge bioscience R&D and a trained workforce capable of launching and supporting enterprises emerging from local research institutions and incubators.

Over past economic cycles including the Great Recession, bioscience jobs have proven unaffected by economic downturn. The industry creates jobs for young and semi-skilled persons, as well as for scientists and entrepreneurs.

The County manages a \$7.6 billion budget to deliver health services to nearly 10 million residents. These expenditures can be directed to support new devices, processes, and therapies that can improve the public health of Los Angeles.

Bioscience: Key Investments

The County has commissioned multiple studies, each identifying the appropriate investments to strengthen the regional life science ecosystem.

Our goal is to facilitate translation of our world-class research into commercial enterprises and local job growth. Key local investments include:



**Physical
Infrastructure**



Early Stage Capital

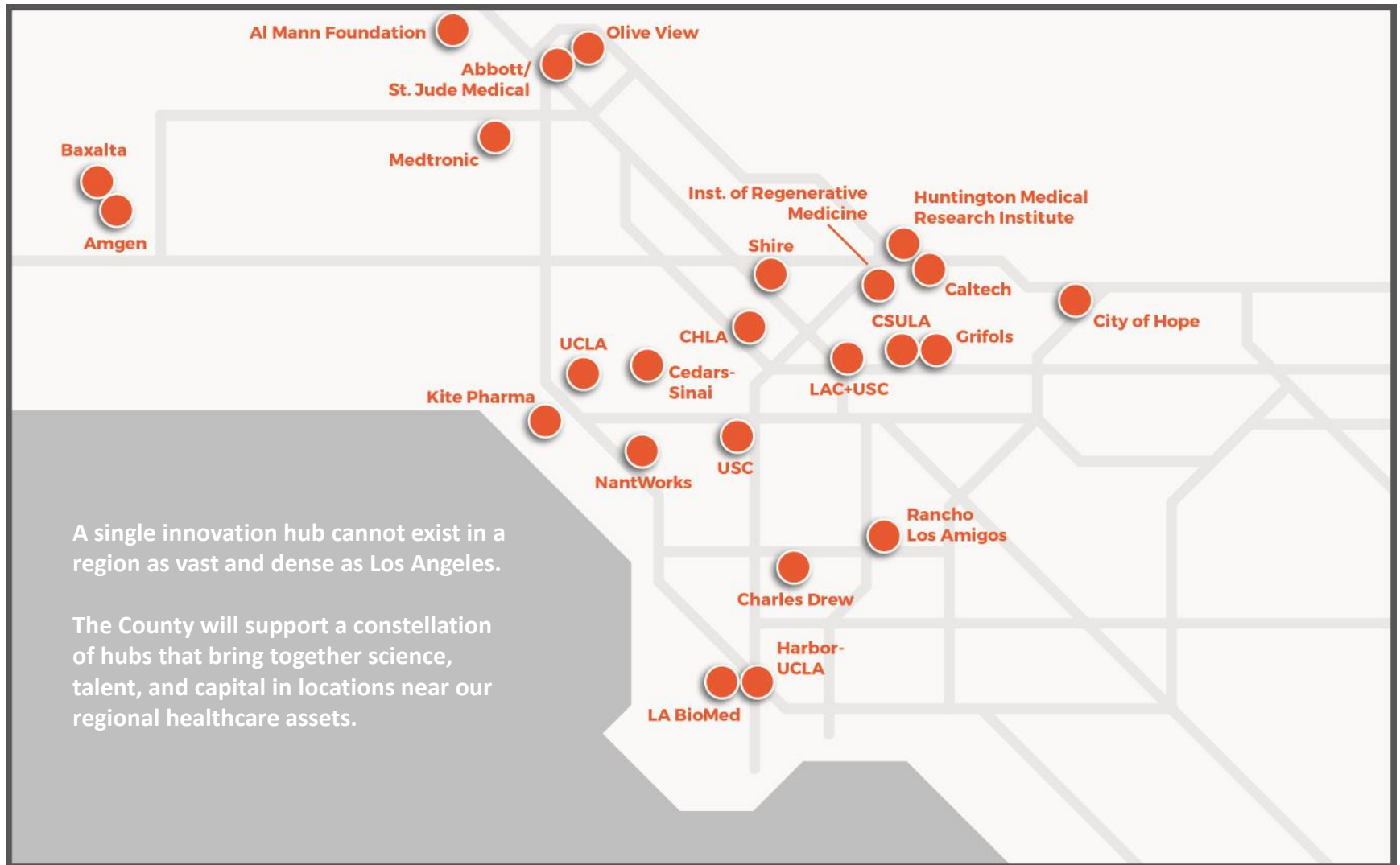


**Talent & Labor
Force**



Ecosystem Catalyst

Bioscience: Infrastructure Investments



ECONOMIC DEVELOPMENT
LOS ANGELES COUNTY

Where Opportunity Meets Success

BIOSCIENCE UPDATE

Bioscience: Infrastructure Investments

350,000sf Bioscience Tech Park on LA County Harbor-UCLA Medical Campus



Bioscience: Infrastructure Investments

LA BioMed Incubator at LA BioMed, Harbor/UCLA Medical Campus



Bioscience: Infrastructure Investments

LA BioSpace Incubator at Rongxiang Xu Bioscience Innovation Center, CSU Los Angeles Campus



Bioscience: Infrastructure Investments



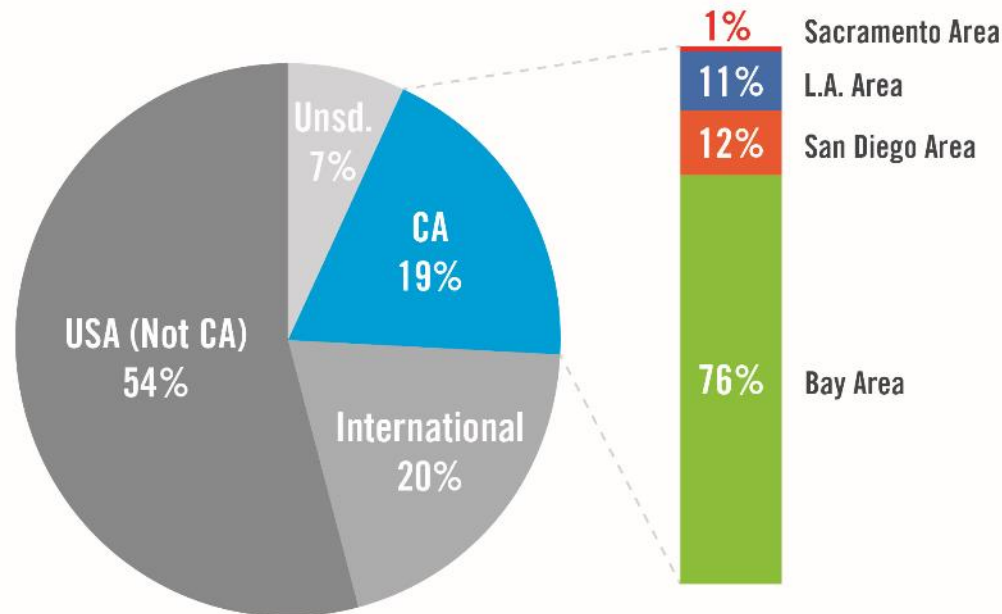
ECONOMIC DEVELOPMENT
LOS ANGELES COUNTY

Where Opportunity Meets Success

BIOSCIENCE UPDATE

Bioscience: Capital Investment

INVESTORS W/ RECENT INVESTMENTS IN BIOTECHNOLOGY BY HQ LOCATION

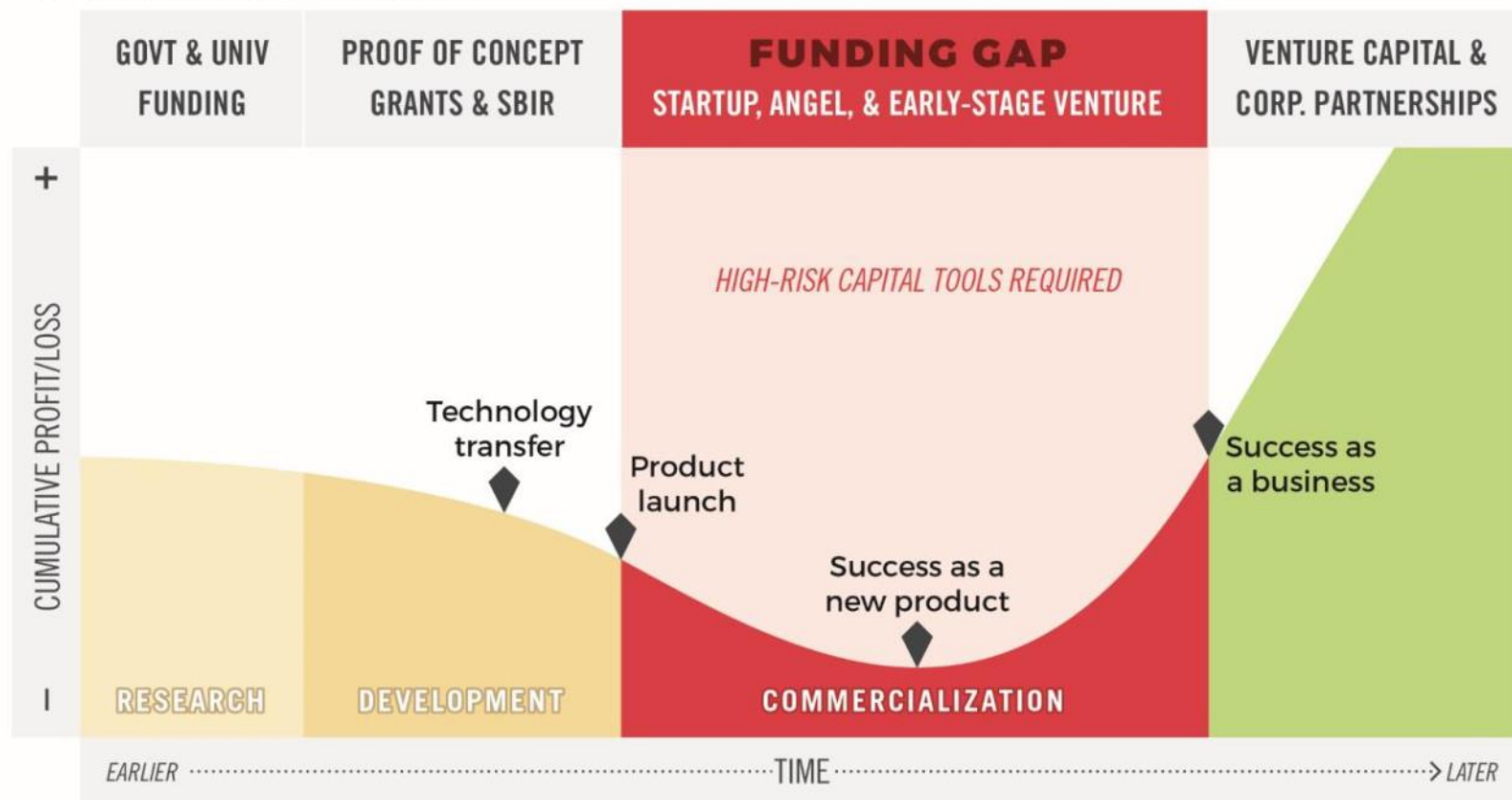


Note: Data includes individual angels

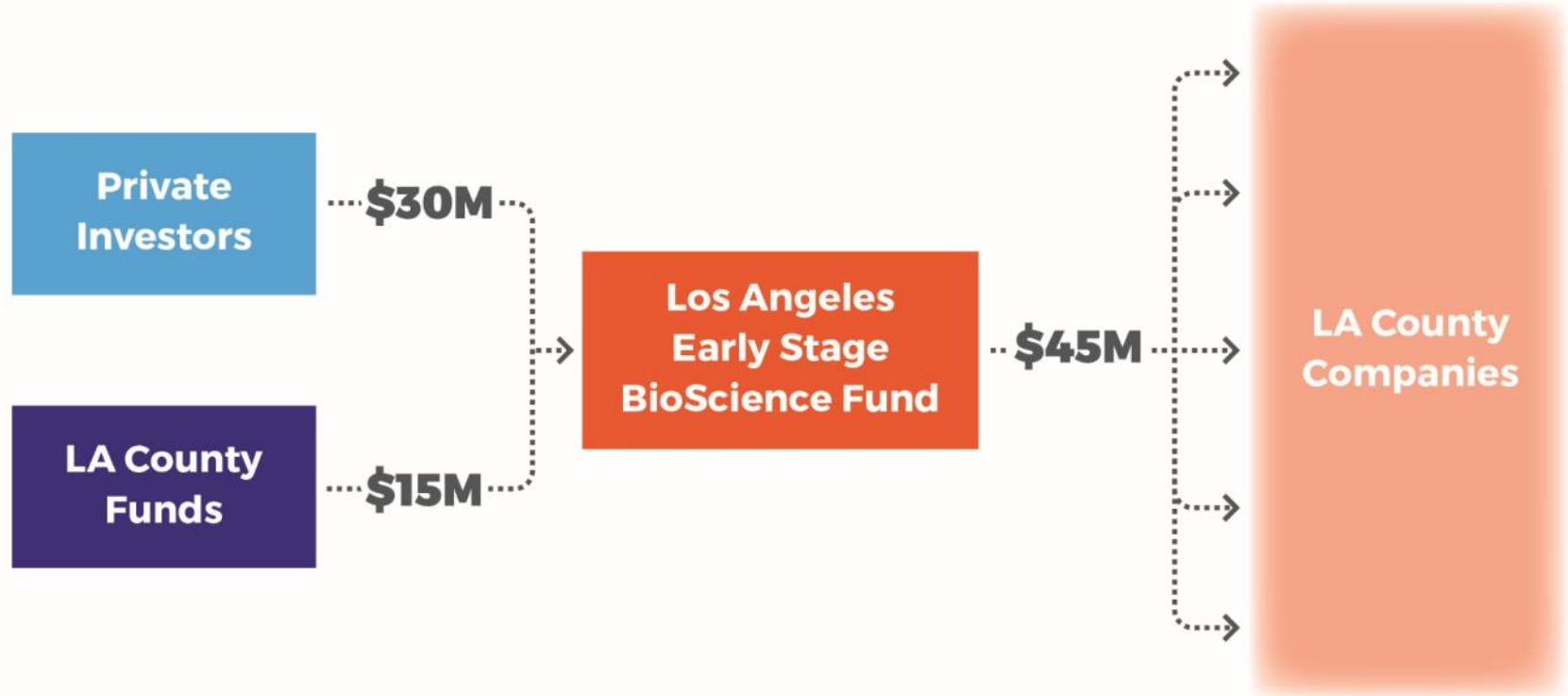
- LA attracts a ton of venture capital (\$4.2 billion last year alone), the third largest market nationwide for VC funds
- But LA biotech VC funding is limited, well behind San Diego and the Bay Area
- One problem is a lack of local VCs with track record in early stage bioscience

Bioscience: Capital Investment

“VALLEY OF DEATH”



Bioscience: Capital Investment



Bioscience: Workforce Investment

- ❖ Los Angeles County is home to 2,448 life science establishments with direct and indirect employment of more than 231,000 jobs.
- ❖ Three of the world's most prestigious research universities (Caltech, UCLA and USC) are located in Los Angeles. Local colleges and universities award degrees to more than 5,000 new graduates annually in life sciences at all levels.
- ❖ More than \$53 million in annual Workforce Investment Act funds are allocated in Los Angeles to support key industry sectors such as bioscience. Federal and State guidelines require a demand-driven approach to ensure that industry has a skilled workforce to remain competitive.
- ❖ Los Angeles County is working with the region's community college system to roll launch pre-apprenticeship and apprenticeship programs connected to life sciences.

Bioscience: Ecosystem Catalyst Investment



Ecosystem Catalyst Investment

STAKEHOLDERS

- Academic Institutions
- Research Hospitals & Institutes
- Investors
- Start-up Companies
- Mature Companies
- Trade Associations
- Public & Quasi-public Agencies

NEEDS & INQUIRIES

INNOVATION CATALYST



SOLUTIONS*

ACTIVITIES

- Investments & Incentives
- Coordination, Convening, & Facilitation
- Marketing & Communication
- Inquiry Triaging & Referrals
- Targeted Outreach
- Partnerships

**Program delivery as well as promoting collaboration
and making referrals to other organizations*

Proposed Catalyst: Bioscience Los Angeles County (BioLA)

“BioLA’s mission is to ensure that all of Los Angeles’s bioscience resources are brought together in a collaborative, highly coalesced ecosystem”

- ❖ Non-Profit led by a board of industry and civic leaders, facilitating the execution of a shared vision for regional success.
- ❖ A focal point for partnership between LA County government, research institutions, and the private sector.
- ❖ Sending a strong signal that Los Angeles is committed to becoming an international player in the commercial life sciences.
- ❖ Implementing regional branding, marketing, and single point of contact for entrepreneurs and investors seeking to connect with the region.
- ❖ Growing the pool of executive and entrepreneurial talent, and aligning workforce investments to the life science sector.
- ❖ Connecting local family offices and angels to Los Angeles investment opportunities.
- ❖ Supporting a regional ecosystem that cultivates startup enterprises and holds up exceptional innovations to the world.

Bioscience: Coming Attractions

- ❖ Bioscience Summit at USC Michelson Center (September 20, 2018)
- ❖ Announcement of BioLA organization with Founding Board (Q3 2018)
- ❖ Opening of LABioSpace Incubator @ CSULA (Q3/Q4 2018)
- ❖ Opening of LA BioMed Incubator (Q4 2018)
- ❖ Launch LA County Bioscience Investment Fund (Q4 2018)
- ❖ Launch Life Science Apprenticeship Program (Q4 2018)
- ❖ Harbor-UCLA Tech Park Development Partner Announcement (Q1 2019)