

# Life Sciences Snapshot

A Quarterly Report on  
Financing Trends

From Federal to State: Building the  
New Life Sciences Capital Stack  
Q3 2025

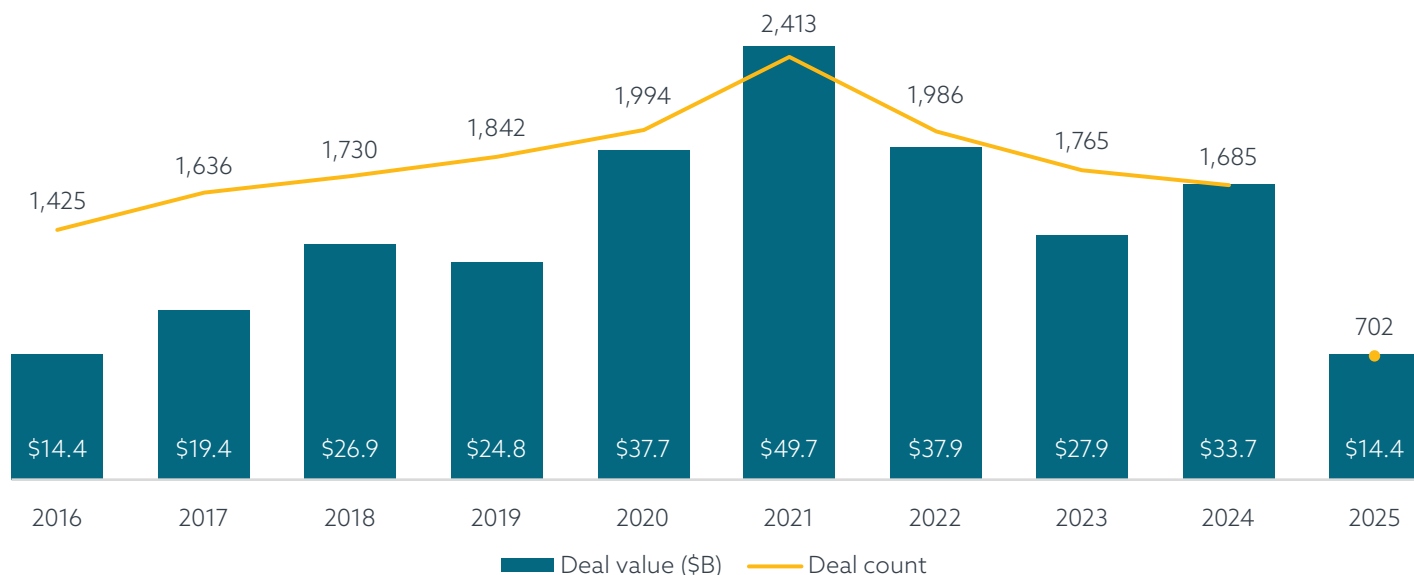


Data provided by



# Key Takeaways

## Life sciences VC deal activity



Source: PitchBook • Geography: US  
As of June 24, 2025

This year, US VC funding into the life sciences sector has cooled: Q1 softness was followed by a decade low in VC transactions in Q2. Despite the moderation in dealmaking volume, investors continued to deploy sizable checks, enabling the total capital invested in Q2 to outperform pre-pandemic levels of quarterly investment. Thus, fewer companies raised money, but those that did secured record check sizes while a fragile exit window kept many later-stage startups private for longer.

Key takeaways for Q2 2025 include:

- Deal flow remained subdued. Combined Q1 and Q2 financings represented only 42.7% of 2024's total deal value, and the AI-led resurgence visible in other VC verticals has yet to spread to life sciences, suggesting continued caution toward capital-intensive clinical development.
- Capital was concentrated in larger rounds. Rounds over \$25 million have absorbed 81.3% of the dollars deployed YTD, pushing median valuations to fresh highs

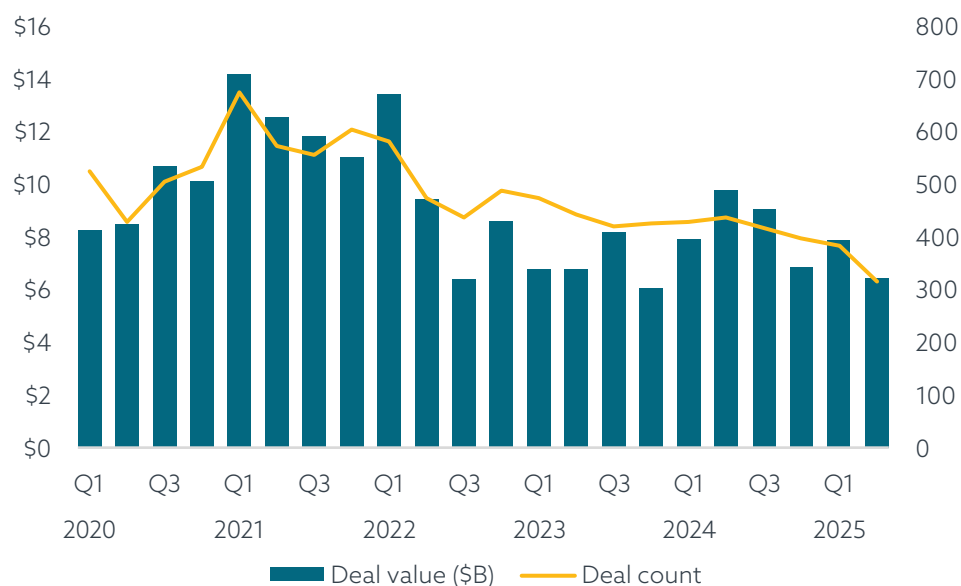
at the early and venture-growth stages and making venture-growth companies the prime beneficiaries of investors' risk-off posture.

- Startups looking to exit favored trade sales over IPOs. Only 46 VC-backed life sciences companies have exited YTD, and just seven of those exits were IPOs. Acquisitions accounted for the most exit liquidity, and their median exit value rose to \$350 million by Q2 as strategics paid up for margin-enhancing assets.

# Market Analysis

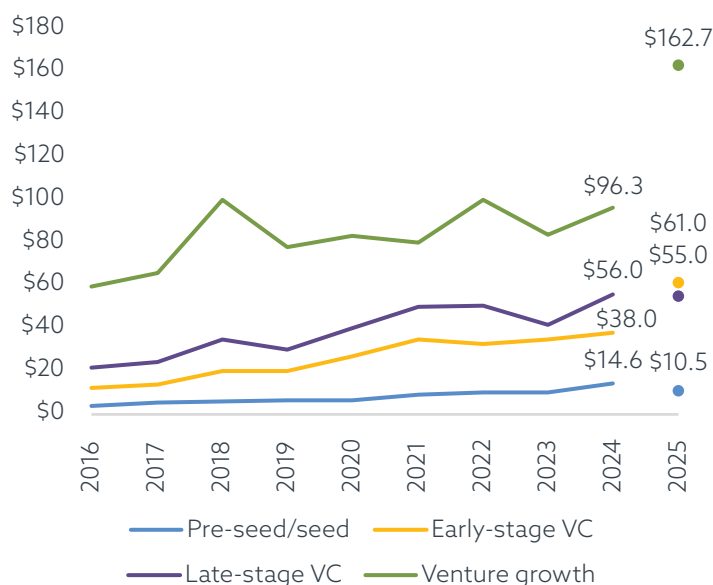
Moderation is the best descriptor for recent US VC funding trends in the life sciences sector. Q1 2025 deal activity slowed slightly compared with the same period last year, and Q2 continued the downward slide in deal volume. In fact, the Q2 2025 deal volume (318 deals) was the lowest quarterly figure the sector has seen in a decade. On the other hand, check sizes fared slightly better—the total capital invested in Q2 2025 (\$6.5 billion) still outpaced pre-pandemic investment levels. Overall, the moderations in Q1 and Q2 dragged H1 2025 dealmaking activity down to 41.7% and 42.7% of 2024's total deal volume and capital invested, respectively. The 2025 rebound in the broader US VC funding landscape spurred by AI investment momentum remains elusive to life sciences startups. However, there have been a few AI life sciences

Life sciences VC deal activity by quarter



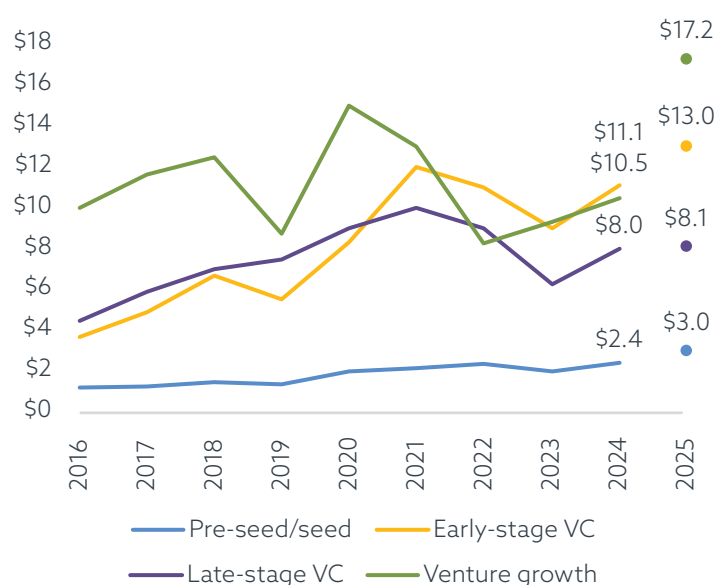
Source: PitchBook • Geography: US  
As of June 24, 2025

Median life sciences VC pre-money valuation (\$M) by stage



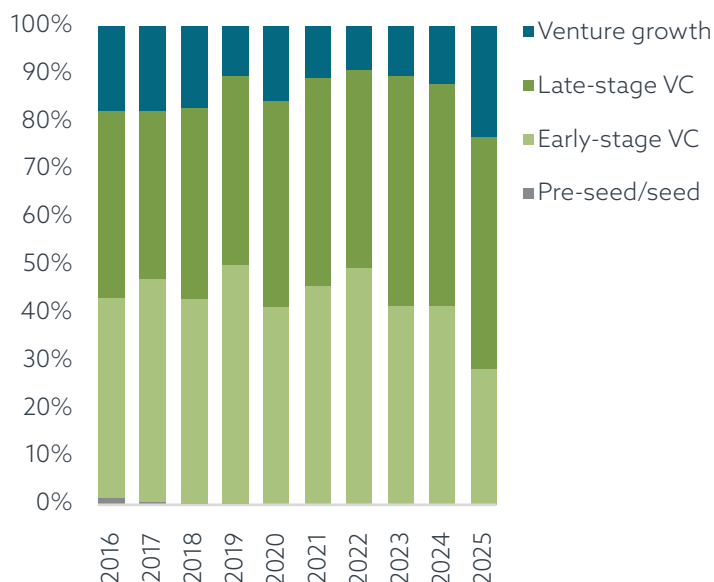
Source: PitchBook • Geography: US  
As of June 24, 2025

Median life sciences VC deal value (\$M) by stage



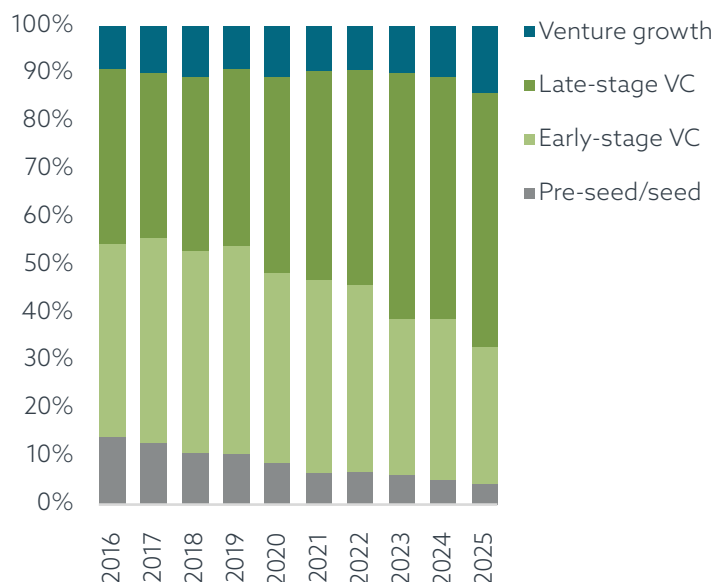
Source: PitchBook • Geography: US  
As of June 24, 2025

Share of life sciences VC deal value by stage



Source: PitchBook • Geography: US  
As of June 24, 2025

Share of life sciences VC deal count by stage



Source: PitchBook • Geography: US  
As of June 24, 2025

outlier deals, and trickle-down effects may be observed later on as AI use cases are commercialized.

In 2025, venture-growth and early-stage life sciences startups saw larger check sizes, which led their median valuations to creep upward and their average valuations to hit new ceilings. In the same vein, the share of life sciences capital invested in deals exceeding \$25 million has crept upward over the years to 81.3% YTD, compared with 65.3% in 2016. In one of the largest life sciences transactions in Q2, Elon Musk's neurotechnology company Neuralink raised a \$650 million megadeal in May that valued the company at \$9 billion. Pathos' \$365 million Series D transaction that same month doubled down on the appeal of AI to life sciences investors.

On the other hand, US VC exits in life sciences in 2025 have shown that exit-ready companies have

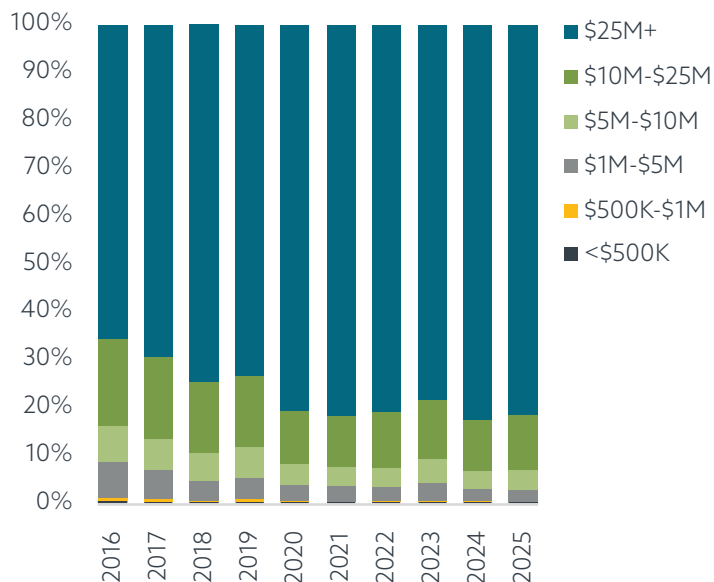
sourced capital from private markets instead of public ones. Only 46 VC-backed life sciences companies have successfully exited YTD, meaning public markets did not provide much-needed liquidity to a growing pipeline of later-stage companies. Rather, median and average valuations and deal sizes for venture-growth companies have grown markedly YTD, positioning these companies as the main beneficiaries of the large checks being written in the current risk-off environment. Deal volumes and capital invested across these two stages captured a growing share of US VC deal activity, and developments such as the US Food and Drug Administration's new AI tool for clinical reviews bode well for the late-stage life sciences dealmaking outlook.<sup>1</sup> Looking forward, the exit window is not expected to open any time soon given the Federal Reserve's stance on maintaining current interest rates, an anticipated tariff-

exacerbated inflationary environment with supply chain disruptions, and political uncertainties.

That said, life sciences startups eyeing an IPO have faced substantial setbacks in 2025, as only seven have completed a listing YTD. Acquisitions have driven a larger share of VC exit activity. Acquisitions have consistently constituted over half of VC exits in the sector, and this exit strategy is still favored. Consequently, this trend has materialized with median acquisition valuations growing over threefold to \$350 million YTD compared with the median valuation of \$100 million in 2024. Public markets generally provide a deep capital pool for mature life sciences companies that need more capital to fund clinical trials. However, acquisitions remain the mainstream exit route as Big Pharma acquirers have paid large premiums for strategic consolidation decisions in 2025.

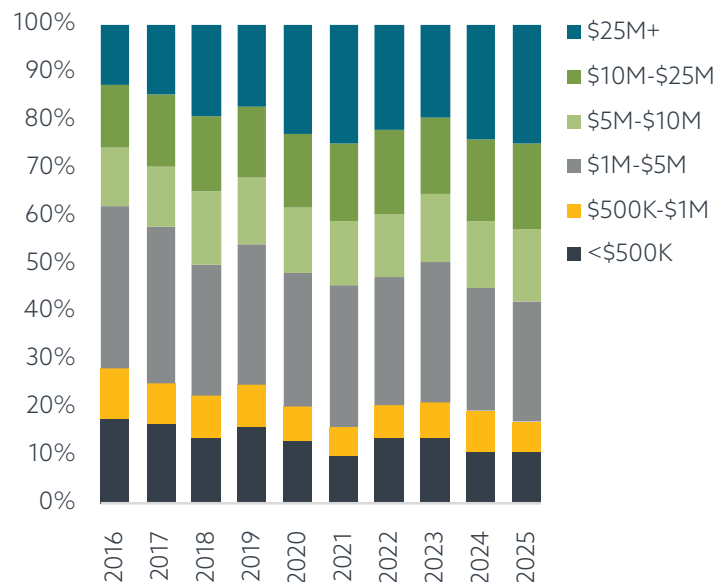
1: "FDA Launches Agency-Wide AI Tool to Optimize Performance for the American People," US Food and Drug Administration, June 2, 2025.

Share of life sciences VC deal value by size bucket



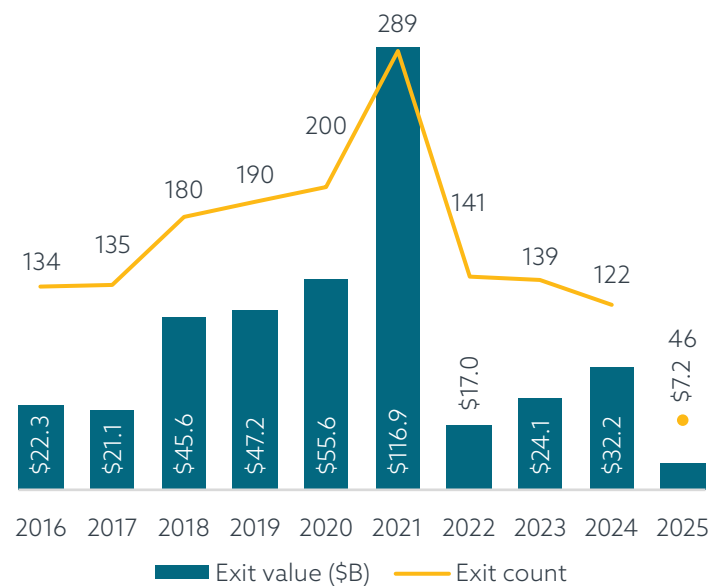
Source: PitchBook • Geography: US  
As of June 24, 2025

Share of life sciences VC deal count by size bucket



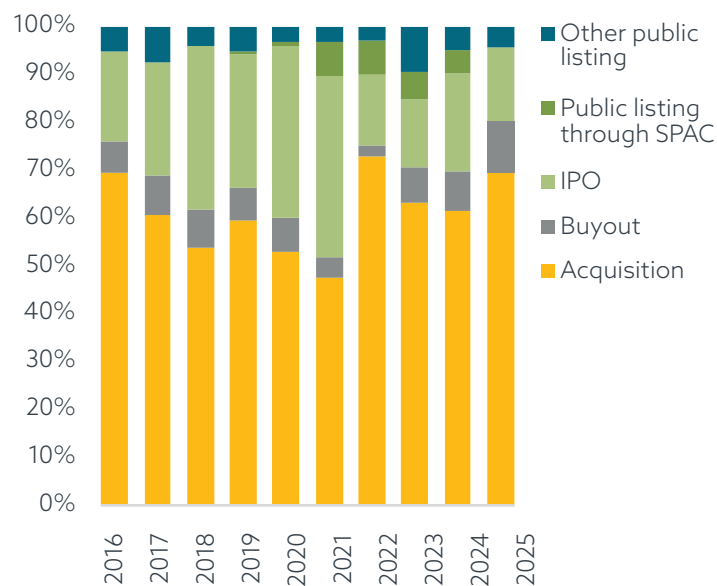
Source: PitchBook • Geography: US  
As of June 24, 2025

Life sciences VC exit activity



Source: PitchBook • Geography: US  
As of June 24, 2025

Share of life sciences VC exit count by type



Source: PitchBook • Geography: US  
As of June 24, 2025

# Roundtable

## INTRODUCTION


*With federal funding sources becoming increasingly constrained and competitive, life sciences companies are looking beyond traditional National Institutes of Health (NIH) grants and federal contracts to fuel innovation. States are stepping up — deploying capital through innovation funds, economic development agencies, public-private partnerships, and infrastructure support. At the same time, alternative capital providers, including venture debt, royalty financing, and structured equity, are filling critical gaps for scaling biotech, medtech, and diagnostics companies. In this conversation, we'll explore what's driving the shift toward nontraditional funding sources, how companies can tap into state-level programs, and how investors and operators are adapting their strategies in response to this changing landscape.*

### **What's driving the increased interest in alternative financing for life sciences companies today?**


**Jonathan Thomas:** Traditional fundraising has been difficult in the life sciences for the past few years. VCs, who in recent years had already trended towards focusing primarily on late-stage clinical companies, are increasingly keeping their powder dry completely to put into their portfolio companies, which they anticipate are going to have a hard time in this environment raising funds themselves. IPOs have shrunk in number the past three years, with well over 60% of those that did issue now trading under their original offering price (some of those trading under cash). This trend has

## Panel


### Contributors



**Jonathan Thomas**  
PhD, JD, President and CEO, California Institute for Regenerative Medicine (CIRM)




**Katy Parker**  
Director of Project Management, Economic Development Partnership of North Carolina (EDPNC)




**G. Kenneth "Ken" Smith, PhD**  
Chief Product Development Officer, Cancer Prevention & Research Institute of Texas (CPRIT)

### Moderators



**Angus McQuilken**  
Business Development Associate Director – Life Sciences, Orrick



**Stephen Thau**  
Partner and Co-Chair of Life Sciences and Healthtech Group, Orrick, New York, Silicon Valley

increasingly lessened retail investor interest, making it tougher to attract high net worth investors. All of this adds up to a need for alternative financing alternatives. Now layer on to that the cuts at the federal level in NIH and National Science Foundation (NSF) funding, and you have the direst fundraising environment of the past 10 years.

### **How are policy changes at the federal level affecting access to traditional non-dilutive capital sources like NIH, BARDA, and SBIR grants?**

**Jonathan Thomas:** Those changes are dramatic and are making such traditional non-dilutive capital much more difficult to come by.



**What funding sources are you seeing companies turn to most often right now?**

**Jonathan Thomas:** Where available and subject matter appropriate, companies are looking increasingly to entities like CIRM and CPRIT for alternative funding. The problem there, of course, is that CIRM and CPRIT only fund stem cell/ gene therapy and cancer research, respectively. The other principal source is philanthropy, which itself has major challenges, as the vast majority of high net worth or ultra-high net worth individuals don't have healthcare or medical research as one of their priorities.

**Several states have launched ambitious biotech and innovation funds. What models seem to be working best?**

**Ken Smith:** In terms of sheer number of applications for funding CPRIT received 164 application this last cycle. Whether that translates into processes that are working best is not clear but most of the applications were of high quality.

**Jonathan Thomas:** CIRM and CPRIT (modeled after CIRM) are highly successful in having large sums of money to deploy to applicants in their space. Other states have/ have had life science funds, but those have typically been through annual appropriation from their state legislatures. That money competes with other budgetary priorities and tends to be substantially smaller in size.

**What are the advantages to pursuing state funding, as opposed to traditional federal sources?**

**Jonathan Thomas:** In a normal time, applicants will want to pursue both sources to the full extent possible. In the current environment, state funding—which is not subject to federal funding cuts—is a more stable potential source of financing.

**What should founders know about how to access or position for state-level funding or incentives?**

**Katy Parker:** In North Carolina, our greatest incentives are our workforce, cost of doing business, and low (soon-to-be 0%) corporate income tax. The ecosystem and support provided by state and local partners as well as NC Biotechnology Center are invaluable. In terms of discretionary incentives, in NC, it's all performance based. Yes, this can seem like a challenge in terms of up-front monies, but the long-term risk on the company (i.e. clawbacks, renegotiations, etc.) is significantly lower.

**Jonathan Thomas:** Speaking for CIRM, we have a very comprehensive website setting forth all our programs, eligibility criteria, selection processes, etc. The key to it all is having a requisite nexus to California, as California taxpayers are paying the debt service on the bonds issued to fund CIRM grants. Applicants should thoroughly review our website and then, if they think they're eligible, contact CIRM to discuss the application process. We are very interactive with potential applicants to answer questions as they put their applications together. Those applications, of course, will be subject both to staff review and peer review. Those that make it through peer review are then presented to the CIRM Board for consideration and approval (or not).

**How are states balancing direct funding to companies vs. infrastructure investment (e.g., incubators, lab space, tax credits, workforce development)?**

**Katy Parker:** North Carolina is doubling down on growing, attracting, and retraining a highly skilled workforce. Specifically in life sciences, we are investing in regional assets like the Eastern Region Pharma Center as well as biotech-specific training facilities across the state. A recent example is the Golden LEAF Foundation's recent

award to Wilson Community College of \$13 million for a biotech workforce training center.

**From an investor perspective, how do state programs change the calculus for backing early-stage or capital-intensive life sciences startups?**

**Ken Smith:** CPRIT's grants are non-dilutive and as such CPRIT sees no return on its grant until the company generates revenue. Even then the return is normally not more than 4x and the royalty is rather low. The grant is inexpensive capital.

**Jonathan Thomas:** State investment changes the calculus in two important ways. First, any such funding is non-dilutive—the most valuable kind. All investors readily welcome any and all non-dilutive funding a company can get. Second, state funding helps legitimize the company, as any company getting such funding was subject to rigorous peer review before being approved.

**How are you advising your portfolio companies on combining state programs with other forms of capital?**

**Jonathan Thomas:** We strongly advise aggregating funds from all possible sources to ensure having enough money to see projects through to fruition. It never hurts to see that applicants have funding in place from other sources before they apply for CIRM grants.

**Can you share a case study of a company that successfully leveraged state resources to catalyze growth or derisk product development?**

**Ken Smith:** CPRIT funded a company with a grant where the funds are distributed in two tranches a year for 3 years as long as the company has matching funds in each of those years. In the middle of year 2 the company could not raise matching funds for the second tranche of year 2

and proposed that CPRIT make an equity investment with the year 3 funds so the company could attract other investors to raise the matching funds. CPRIT executed the equity agreement with the company which was able to attract a number of other investors and thus was able to raise more than the matching funds needed.

**Katy Parker:** North Carolina is increasing the utilization of C-PACE financing for property (re) developments that would have an impact on sustainability as well as resilience. We see great potential for life sciences and R&D operations to benefit from this longer-term financing stack.

**What are the pitfalls or red flags founders should watch for when evaluating non-dilutive or hybrid financing options?**

**Jonathan Thomas:** The most common red flag with non-dilutive funding is the “strings attached.” Applicants need to make sure they’re fully familiar with all such strings to determine if those strings work for them were they to get the grant award in question.

**Ken Smith:** CPRIT funds projects rather than companies. Thus at times CPRITs goals may not completely align with those of other investors. With respect to contracting CPRIT has terms such as royalty tailing that may give other investors pause. While CPRIT funds projects if the company’s technology is a platform technology which can be used for multiple indications CPRIT expects a return on other indications that were based on the CPRIT funded grant.

**Are there policy changes or state initiatives on the horizon that could open up new opportunities for life sciences financing?**

**Jonathan Thomas:** This question is playing out in real time as states grapple with federal funding cuts in healthcare as well as in many other areas. How this plays out as things progress will be one of the major factors in determining the future and competitive positioning of scientific research in the US going forward.

**What advice would you give a founder seeking to build a financing stack that incorporates both traditional and alternative sources?**

**Jonathan Thomas:** Leave no stone unturned. Particularly in today’s environment, you have to pursue absolutely every option available.

**If you could wave a magic wand, what kind of financing mechanism or policy change would you create to better support life sciences innovation?**

**Jonathan Thomas:** Having a ballot initiative mechanism like those available in California and Texas to have the potential (voters willing) to generate large sums of grant money for health care research in each of the 50 states.



# Creators. Visionaries. Underdogs. The Risk Takers.

We help you disrupt. We help you grow.  
We protect you. We help you win.

**Top 3 for Innovation 9 years in a row 2016-2024**

— *Financial Times*

**#1 Most Active Venture Capital Law Firm in Europe**

– **9 years in a row!**

— *PitchBook 2024 League Table Rankings*

**#5 Globally – Top 5 Globally for 8 years in a row!**

— *PitchBook 2024 League Table Rankings*

## CONTACT US

### **Carsten Bernauer**

Partner  
cbernauer@orrick.com

### **Tony Chan**

Partner  
tychan@orrick.com

### **Ed Dyson**

Partner  
edyson@orrick.com

### **Craig Falls**

Partner  
cfalls@orrick.com

### **Jake Gatof**

Partner  
jgatof@orrick.com

### **David Gindler**

Partner  
dgindler@orrick.com

### **Gregg Griner**

Partner  
ggriner@orrick.com

### **Blake Ilstrup**

Partner  
bilstrup@orrick.com

### **Scott Iyama**

Partner  
siyama@orrick.com

### **Thora Johnson**

Partner  
thora.johnson@orrick.com

### **Amy Joseph**

Partner  
ajoseph@orrick.com

### **Neel Lilani**

Global Head, Tech Clients  
nlilani@orrick.com

### **Ed Lukins**

Partner  
elukins@orrick.com

### **Angus McQuilken**

Business Development  
Associate Director  
amcquilken@orrick.com

### **Mike O'Donnell**

Partner  
mike.odonnell@orrick.com

### **Georgia Ravitz**

Partner  
gravitz@orrick.com

### **Jeremy Sherer**

Partner  
jsherer@orrick.com

### **David Schulman**

Partner  
dschulman@orrick.com

### **Mark Solakian**

Partner  
msolakian@orrick.com

### **Gargi Talukder**

Partner  
gtalukder@orrick.com

### **Stephen Thau**

Partner  
sthau@orrick.com

### **Albert Vanderlaan**

Partner  
avanderlaan@orrick.com