



LIFE SCIENCE FORUM

Presented by BizFed Institute & BizFed Member Biocom California

Hosted by BioscienceLA in Culver City

July 15, 2022









We have two overarching goals when hosting BizFed Institute forums: facilitate the exchange of actionable solutions and spark productive, otherwise unlikely partnerships between private and public sector leaders. A third goal guided the planning and production of our inaugural Greater LA Life Science Forum, presented in partnership with BizFed member Biocom California: improve lives and strengthen livelihoods by spurring the growth of an emerging sector responsible for grossly under-recognized contributions. I thank the sponsors, speakers, staffers, and attendees who leaned in, and are working with business leaders in our orbit on an ongoing basis, to help us achieve all three of these goals. Before we launch into our summary of key takeaways from this forum, I'd like to lay out several challenges facing the life science industry, as detailed in Biocom California's 2021 California Economic Impact Report.

- California's lack of affordable middle-income housing will stymie talent recruitment and retention.
- Supply chain disruptions affecting critical materials could lead to price spikes and production issues.
- Efficiently-run port operations, ground shipping, and airline facilities are vital for this industry's supply chain.
- Pandemic-related border restrictions could stop international employees and students from working in the states.
- Merger constraints on antitrust grounds could prevent industry expansion.
- Higher tax rates could discourage investment by adversely affecting future profit expectations.

Together, I'm confident we can tackle these challenges and #growLAbio for the benefit of humanity and society.

win Harlan Kevin Harbour

BizFed Institute President

Ali Sahabi, President of Optimum Group, delivered heartfelt opening remarks about his decision to support the life science industry through his generous sponsorship of the Greater LA Life Science Forum. It's more than "just a business opportunity," he told attendees. His support of this emerging sector - like the seismic resiliency he fosters in his day job - will directly bolster the next generation's quality of life. Ali said he wants to be able to tell his children, "When you're my age, you won't have to worry about things I'm worrying about."

I can tell my kids they're going to have a better quality of life because of what you all do.

- 66 -The life science industry is the best-kept secret in LA. We're letting the cat out of the bag now. 99



Stephanie Hsieh, Executive Director of Biocom California's LA office, kicked off the event by quoting yours truly. I'm humbled she remembered my words, uttered when I was first briefed on the economic impact and job-creation potential of the life science industry, and certain they reflect the sentiments of other regional business leaders.

- LA County's life science industry secured nearly \$2 billion in NIH funding, according to Biocom's 2021 California Economic Impact Report. That's second only in the nation to Cambridge, MA.
- LA County is home to 20% of the state's life science workforce.
- The life science industry is a robust economic multiplier effect, generating an extra 85 cents per dollar of sales.

"It's really a no-brainer that we support the health of this industry - not just for the health of our loved ones, but the sake of our economic health," said Stephanie.



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Life Science Flash Poll Takeaways

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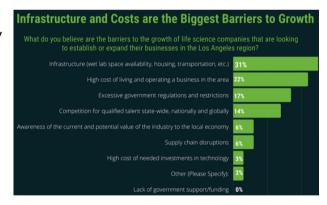


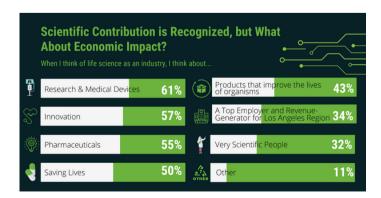
44 professional representing 11 industries (including professional services, real estate, energy and utilities, health, and education) shared their perspectives on the current state of the region's life science industry. Findings confirm and underscore our hypothesis that all Angelenos stand to gain from increased pubic awareness of life science activities, contributions, and potential for growth.



Nearly 90% of poll respondents underestimated both the total business sales and jobs generated by the life science industry in LA County. There appears to be stronger recognition of the industry's scientific impact than its economic impact. It did, indeed, generate \$60.8 billion in total business sales and 232,000 jobs in LA County, according to Biocom California's 2021 California Economic Impact Report.

Respondents correctly identified infrastructure challenges (including wet lab, housing, and transportation availability) as a key barrier to the growth of life science companies. Respondents who selected "other" cited lack of general awareness of life science contributions, centralized pharmaceutical industry systems, and lack of useable commercial property.





More than half of respondents recognize the life science industry's contributions to research and medical devices, innovation, pharmaceutical advances, and life-prolonging measures, but only a third of respondents recognize this industry is a top employer and revenue generator for the LA region.





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Highlights

Companies used to move to San Francisco or San Diego to get the talent, lab space, or capital they needed. That's not happening anymore.



Joe Panetta, President and CEO of Biocom California, expanded the boundaries of our goal-setting approach with his big-picture keynote remarks. His job, he said, is to position Greater LA's life science industry for success on the global stage. He glanced around the packed room and reminded attendees that each of their contributions and connections will play a role in ensuring that our local bioscience ecosystem continues to attract land, talent, and capital necessary for internationally competitive growth. He recalled how contacts he made while traveling overseas told him, "We don't know where San Diego is, but we know where LA is." The existing diversity of the LA region positions us perfectly to welcome and nurture valuable partnerships with international stakeholders.

Sup. Holly Mitchell, who represents LA County's 2nd Supervisorial District, delivered remarks via video due to business at the nation's capital that prevented her from attending our event in person. We're grateful for her commitment to supporting both this forum and our goal of growing this sector. The LA County Board of Supervisors voted just days before the forum to approve a game-changing motion by Sup. Mitchell that directs county departments to:

We're fostering paid life science opportunities for college students in underserved communities; emphasis on getting paid.



- Report back in 90 days with a "Life Science Cradle-to-Career" employment pipeline for underserved communities
- Develop a suite of financial incentives to support small life science companies, including tax incentives for start-up costs and hiring, business development services and customized workforce training
- Create a structure for tenant improvement funds to build out life science spaces and upgrade existing spaces for companies that hire locally
- Designate a "Life Sciences Ombudsperson" to triage and streamline jobs, and create an implementation plan
- Explore innovative approaches to zoning in industrial areas that incentivize the siting of life science companies (modeled after the San Diego Employment Mixed-Use Zones)
- Resume good faith collaboration and negotiation with the Lundquist Institute at Harbor-UCLA Medical Center Campus
 to advance development of a biotechnology park that would incubate new companies.

There's only one company making the monkeypox vaccine. It's in Denmark. Why isn't it in Pasadena?



Sen. Anthony Portantino, who represents California's 25th Senate District, gave us a roadmap, made us laugh, and injected a greater sense of urgency and purpose into Thursday's discussion. The life science industry played a tremendous role in lighting our way through the darkest days of the coronavirus pandemic, he reminded attendees. The next epidemic – or full-blown pandemic – could already be on the horizon. It's a matter of both homeland security and public health. The LA region has a unique obligation to embrace all preventive measures because we have the local resources and ingenuity to take coordinated action benefitting humankind, Portantino said. He also urged attendees to "take full advantage" of his remaining two years in office and the state's record \$97 billion surplus. "We have the checkbook to help this year," he said. Noted, senator.

Our Fireside Chat featuring **Willie Zuñiga**, President of Grifols Biologicals, tugged at heartstrings. We don't feel any summary can fully capture the sense of gratitude and community espoused by Willie's remarks. We believe his life story speaks for itself - and spotlights the life science industry's unparalleled ability to improve both lives and livelihoods. Lean in to support students in underserved communities. They could be the next Willie Zuñiga

"Zuñiga was born and raised in El Sereno and nearby Lincoln Heights, and attended two years of college with a dream of becoming a medical doctor. He married young, welcomed a daughter, and had to hit the bricks instead of the medical library stacks. He landed a job in 1979 at Alpha Therapeutic, starting as an entry-level manufacturing tech. He was 21. He later went to nearby CalState LA to finish his bachelor's. He's now company president, having worked in just about every area of the plant."

- Los Angeles Business Journal

Our obligation is to save lives and improve the quality of life. But we must also strengthen communities. It's vital to do that through school partnerships.





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PANEL 1: What Is Life Science?

Moderated by Rohit Shukla - Larta Institute, Founder & CEO

Panelists:

Bassil Dahiyat, Ph.D. - Xencore, President & CEO Monica Jain, M.D. - Wavemaker Three-Sixty Health, Venture Partner Jessica Droge, Ph.D. - Amgen, Vice President, Business Development Abner Mason - SameSky Health, Founder & CEO



KEY TAKEAWAYS

- The coronavirus pandemic has demonstrated the centrality of the life science industry, but political noise and NIMBYism continue overshadowing the sector's importance to our fundamental health and well-being.
- Los Angeles is the "gene pool of the world." We must break down barriers between academic communities, research institutions, medical systems, and other silos to realize the region's full potential as a global hub for life science innovation.
- "Putting stuff in bottles that you sell" is a manufacturing business at its core. This is a jobs industry that requires people.
- The timidity of real estate investors has stalled the industry's growth, while university administration systems have complicated collaborative efforts between industry innovators and academia.
- LA is home to three top-tier medical systems, but stubborn sub-sector barriers have walled off opportunities for invaluable "cross-pollination" of ideas.
- We must invest in expanding and diversifying patient pools for clinical trials, with increased focus on recruiting patients from underserved communities.
- Scientists from academic institutions must be trained to think about the commercial viability
 of products in the future. How much will it cost to make in 15 years? How could the patient
 population evolve?



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PANEL 2: What Can You Do?

Moderated by Michael Kelly - LA Coalition for the Economy & Jobs, Executive Director

Panelists:

Stephen Cheung - LA County Economic Development Corporation, Chief Operating Officer Karmin Noar - Biocom California Institute, Executive Director



KEY TAKEAWAYS

- LA's best asset is Angelenos. Being more intentional in helping people turn ideas and opportunities into viable businesses will result in immediate payoff, thanks to our world-class talent pool.
- Contrary to popular assumption, the LA region is fueled by far more than entertainment, athletics, tourism, and related enterprise. The LA County Economic Development Corporation recognizes the value of investing in partnerships and infrastructure that can stimulate the creation of life science jobs.
- The region is investing heavily in infrastructure such as sports stadiums, but we're not using these
 venues every day. If we can temporarily convert them for concerts, conferences, and the like, why
 aren't we doing more to support the life science sector with infrastructure that's readily available?
- Dozens of emerging and rapidly growing sectors such as life science don't have the marketing or messaging capabilities to compete with the machine behind the entertainment industry. Advocacy entities such as BizFed will play an invaluable role in amplifying life science job-growth opportunities.
- Let's focus more on marketing our strengths to attract international talent. Affordability may not be LA's strong suit, but diversity is. Our region is culturally and linguistically primed to embrace international talent. Texas and Tennessee don't have that.
- We must ensure life science programs, internships, and jobs aren't buried under healthcare opportunities, which students typically have more awareness of.
- Working with business, government, and K-12 partners can help us nurture homegrown talent.
- Training and employing members of underserved communities can help narrow wealth gaps while also empowering us to address disparities in healthcare access.



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PANEL 3: Where & How Can We Grow?

Moderated by Shaun Stiles - Cushman & Wakefield, Executive Director

Panelists:

Melanie Cohn – Biocom California, Senior Director, Regional Policy & Government Affairs Felicia Williams – Kosmont Companies, Senior Vice President Brian Spence – BAM Architecture Studio, Founding Principal & Architect Allan Glass – HATCHspaces, Co-Founder & Principal



KEY TAKEAWAYS

- This is a call to action for real estate investors: life science tenants need lab space! The LA region currently has a 1.8% vacancy rate for wet lab and shared lab space.
- Streamlined collaboration is a unique perk of investing in early-stage ecosystems. Investors, architects, and life science industry representatives are often in the same room to iron out mutually beneficial deals.
- Life science companies typically don't need to conduct heavy industrial activity on site, facilitating more co-locating opportunities.
- If a life science company doesn't have the track record of revenue generation it needs to attract real estate developers, co-locating with other industries can help.
- There are no affordable housing policies, protections, or incentive programs that support life science workers because the industry's middle-range incomes are too high to qualify for affordable housing.
- Developing buildings with lab infrastructure in place can facilitate faster moves for life science tenants, allowing them to quickly shift their focus from relocating back to innovating.
- Some cities are zoning certain areas for job-creating industries, while others such as Pasadena are restricting the amount of lab space real estate developers can build. Creating jurisdiction-specific advocacy plans for the life science industry is tedious but strategic.
- Straight from the mouth of a developer: "If you allow us, the real estate industry will let us tell you where we want you to be and it will be wrong. It's early for the life science industry. Tell us where you want to be. Near anchor institutions? Near public transit hubs?"



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Highlights

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