



California

Programs & Initiatives Advancing the Biopharmaceutical Industry



Key Programs & Initiatives

The opportunities generated by the biopharmaceutical sector as a leader in innovation and high quality job creation are not limited to just a few states, but have a substantial national footprint. States proactively pursue the development of the biopharmaceutical sector because it represents: a large-scale, geographically dispersed supply chain spanning R&D through to production and distribution; a key driver of the economy including the recent economic recovery; and a sector paying high wage rates in quality jobs. States are deploying a range of programs and initiatives to support and grow the biopharmaceutical industry, including: comprehensive state development strategies; investments in R&D and related infrastructure; programs to boost venture capital, entrepreneurship, and innovation development; advanced manufacturing; economic incentive initiatives; and programs working to advance STEM education and training. California, a leader in the biopharmaceutical and broader biosciences industry, has several regional organizations dedicated to advancing the industry across the state with robust programs focused in entrepreneurial development and STEM education and professional development, as well as major research infrastructure and initiatives.

Quick Guide: California's Programs & Initiatives Advancing the Biopharmaceutical Industry



Comprehensive State Strategies to Support Biopharmaceutical Development:

- No statewide strategy but key regional organizations including The California Life Sciences Association (CLSA), Biocom, and SoCalBio



R&D Investment:

- The California Institute for Regenerative Medicine
- Biocom CRO Initiative



Biosciences Infrastructure Development:

- Mission Bay
- Harbor-UCLA Research Park (Proposed)



Venture Capital, Entrepreneurship, and Other Innovation Related Programs and Initiatives:

- California Institute for Quantitative Biosciences
- California's Innovation Hub Program
- CONNECT
- California Life Sciences Institute (CLSI) Fellows Program
- CLSI FAST Advisory Program
- CLSI Expert Network
- CLSA Partnering Day Program
- Bioscience-related incubators and laboratory space (20+)
- Biocom's Partner Days
- Mission Bay Capital
- Biocom Venture Days



Advanced Manufacturing:

- The Amgen Bioprocessing Center at Keck Graduate Institute



Economic Incentives:

- Governor's Economic Development Initiative, Sales Tax Exemption
- R&D Tax Credit



STEM Workforce & Education:

- CLSI Bio-Community
- CLSI Bio-Link Equipment Depot
- CLSI's Amgen Bay Area BioGENEius Challenge
- CLSI, The BioCollaborative
- CLSI, Biocom Institute – The Biotech Primer
- CLSI, Biocom Institute – From the Laboratory to Leadership
- Biocom Institute Teacher Fellows Program
- Biocom Institute Veteran Career Mentoring Program
- Biocom Institute Introductory Life Sciences Experience Program
- San Diego Festival of Science and Engineering
- SoCalBio's Workforce Initiatives
- LA Valley College-U.S. Dept. of Labor Bioscience Workforce Training

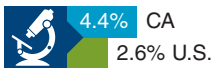
Impacts

- **The California Institute for Regenerative Medicine (CIRM)** – A 2009 study of initial economic impacts estimated the facilities grants alone would create 13,000 "job-years" of employment between 2008-11 and bring in \$100M in tax revenue. By 2014, expected to have created more than 38,000 job years and generated \$285M in state tax revenues.
- **California Institute for Quantitative Biosciences** – Between 2005-13 incubator companies have created hundreds of jobs and raised \$513M in investments.
- **CONNECT** – CONNECT's Springboard entrepreneurship program has 20-year track record with 2,000 companies assisted including 750 completing program since 1993. Companies have raised \$1.5B in capital, and since 2005 created over 4,000 new jobs with 65% of graduate companies still in business today.

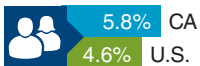
Impacts, continued

- **CLSI FAST Advisory Program** – Since fall 2013, FAST program has generated more than 1,800 advisory hours valued at over \$475,000 for 20 companies. Since participating, companies have raised over \$48M and created 68 new jobs.
- **CLSI Bio-Link Equipment Depot** – Provides high caliber equipment to more than 200 teachers and 85,000 students at the high school and college levels.
- **From the Laboratory to Leadership** – Served more than 3,000 managers from 300 life science companies.
- **LA Valley College-U.S. Dept. of Labor Bioscience Workforce Training** – Of 31 recent grads, 22 had received job offers.

California by the Numbers



R&D as a Share of GSP, 2010



Persons in S&E Occupations as Share of all Occupations, 2012



Patents per 1,000 people in S&E Occupations, 2012



High-Tech Establishments as a Share of Total, 2010

Source: National Science Foundation, Science & Engineering Indicators 2014.

Comprehensive State Strategies to Support Biopharmaceutical Development

California, a leading state in the biopharmaceutical and bio-sciences industry, and considered the “birthplace of biotech” has several regional organizations dedicated to advancing the industry across the state. Given its large size and globally competitive and leading life sciences hubs, this structure is not surprising. These industry associations include:

- **The California Life Sciences Association (CLSA)**, with offices in San Francisco, Sacramento, and San Diego, was formed in 2015 when the Bay Area Bioscience Association (BayBio) and the California Healthcare Institute (CHI) merged. The Association acts on behalf of more than 750 California biosciences companies, research universities and institutes, and other stakeholders to shape public policy and grow the industry and its innovation ecosystem. It further supports the biosciences in entrepreneurship, education, and workforce development through its affiliate organization, the California Life Sciences Institute.
- **Biocom** based in San Diego, is a 20-year old member-driven organization serving Southern California's life sciences industry. Biocom provides a range of initiatives and programs to its 700 member companies in public policy, capital development, group savings, professional network building, and life sciences talent development.
- **Southern California Biomedical Council (SoCalBio)** based in Los Angeles since 1995, is a member-driven trade association serving the varied life science companies and research institutions across 6 counties that make up the Greater Los Angeles region. SoCalBio offers programs and initiatives to its 300 member companies aimed at helping local firms gain access to capital, potential partners, and other business services, while also promoting technology transfer and biosciences workforce training and development.

In addition to the active efforts of industry associations in advancing the bioscience industry across the state, the **Governor's Office of Business and Economic Development (GO-Biz)**, which acts as the single point of contact for the State's economic development and job creation activities, has put forth a regional Innovation Hubs (iHub) program that in several regions focuses on key strengths in biotechnology and biomedical sectors for commercialization initiatives.

California does not have a statewide bioscience-specific strategy or targeted industry focus.

R&D Investment and Infrastructure Programs and Initiatives

The California Institute for Regenerative Medicine (CIRM), was created by voter approval in 2004 to fund stem cell research including on human embryonic stem cell lines. The referendum authorized \$3 billion in funding for research at institutions across California. The mission for CIRM is to “accelerate stem cell treatments to patients with unmet medical needs.” CIRM, also referred to as California’s Stem Cell Agency, does not conduct research but solicits research proposals to fund research, training, and new facilities around California using funds raised through sales of bonds. Oversight is provided through a 29-member governing board made up of researchers, business leadership, and patient advocates. To date, the Board has awarded \$1.9 billion for 668 awards spread across 5 key areas—facilities, education, basic biology, translational, and clinical. In 2015, CIRM launched “CIRM 2.0”, an overhaul of how the Agency operates aiming to advance faster, more efficient processes that emphasize speed in granting and distributing awards, more partnerships and patients.

- **Outcomes:** A 2009 independent study of initial economic impacts of CIRM conducted by The Analysis Group estimated the facilities grants alone would create 13,000 “job-years” of employment between 2008 and 2011 and bring in \$100 million in tax revenue to the state. By 2014 the CIRM programs were expected to have created more than 38,000 job years and generated \$285 million in state tax revenues.

Biocom CRO Initiative. In light of increased outsourcing to Contract Research Organizations (CRO’s), and their expanded presence in Southern California, Biocom established an initiative to connect local bioscience companies with this research network. The Initiative incorporates a committee to act as a liaison between industry and CROs and to look for opportunities for valuable partnerships; holds education and networking events to educate bioscience companies on CRO collaborations; and provides a CRO web portal directory of Biocom members.

Programs and Initiatives to Build Bioscience Infrastructure

Mission Bay. Mission Bay represents one of the largest, most significant development projects in the nation, transforming a former rail yard in San Francisco over two decades into a modern, mixed-use Innovation District development with a premier biotech and health sciences research and education base at its core. Mission Bay spans 303 acres adjacent to AT&T Park, home of the San Francisco Giants, and the City’s Financial District.

- The development is anchored by a 43-acre research campus for UCSF which opened in 2003 and has since grown into a vibrant biotech research and training hub where academia and industry come together in cutting-edge bioscience collaborations and new scientists, clinical researchers, physicians, nurses, pharmacists and dentists are educated in modern complexes that leverage the most advanced equipment.
- The presence of UCSF and the Mission Bay development itself has acted as a catalyst for industry development into the City of San Francisco—growing from one company located in the District when UCSF opened its campus, to more than 100 by 2013. The cluster of bioscience activity around Mission Bay includes:
 - More than 50 startup companies
 - 9 established pharmaceutical and biotech companies
 - 10 venture capital firms, and
 - Leading institutions advancing the biosciences including the J. David Gladstone Institutes, the California Institute for Quantitative Biosciences (QB3) and the Veterans Affairs Research Center
- One of the latest anchor developments in the district is the just opened UCSF Medical Center at Mission Bay, a \$1.5 billion facility that includes several individual hospitals including UCSF Benioff Children’s Hospital San Francisco, UCSF Betty Irene Moore Women’s Hospital, UCSF Bakar Cancer Hospital and the UCSF Ron Conway Family Gateway Medical Building. The location of these new hospitals adjacent to the UCSF research campus and the cluster of industry and other research institutions in Mission Bay is intended to further accelerate translational research, adding the patient context to the ongoing research and education activity and mission of the Innovation District.

Harbor-UCLA Research Park (Proposed). Los Angeles County is laying the groundwork for a new biomedical research park on the Harbor-UCLA Medical Center campus. Initial plans are to develop a 15-acre research park with a 250,000 square foot biotech/biomedical facility at a cost ranging from \$110-

\$125 million to be funded by a public-private partnership. The County's Board of Supervisors has approved moving forward with the project though funding has yet to be fully secured. Harbor-UCLA is also home to LA Biomed, a non-profit biomedical research organization driving innovation in medicine and spinouts from organization may move into the research park.

Venture Capital, Entrepreneurship, and Other Innovation Related Programs and Initiatives

Innovation Development

California Institute for Quantitative Biosciences (QB3). In 2000, Governor Gray Davis established four Institutes for Science and Innovation with the intention of advancing research and commercialization in areas identified as critical to California's economy. The Institutes, including that most aligned with the biopharmaceutical sector—the California Institute for Quantitative Biosciences or QB3—represent a partnership between the University of California system, state government, and industry with strategic collaborations across each entity. Taken together, the four Institutes represent multidisciplinary partnerships spanning a billion-dollar public-private investment.

- QB3 leverages the convergence of research strengths across several UC campuses and disciplines critical to the “quantitative biosciences” including techniques from physics, chemistry, and computer sciences. QB3 research facilities, with an academic director leading each site, are located at UC Berkeley, UC Santa Cruz, and UC San Francisco. QB3 maintains collaborative research facilities often including large equipment such as MRI scanners, genome sequencers, or supercomputers. The “Innolab” is a fourth segment within the QB3 Director's office focused on assisting researchers with commercialization.
- The Institute has developed a range of support for entrepreneurs including a network of incubators, a venture capital fund, a “startup in a box” program, SBIR/STTR workshops, and Bridging-the-Gap Awards. The QB3 Incubator Network spans 40,000+ square feet of space, and more than 70 resident companies across:
 - 3 QB3-managed incubators: on-campus at Berkeley and UCSF, and the flagship QB3@953, in San Francisco
 - A partnership with StartX to open StartX-QB3 Labs in Palo Alto, the first shared med/biotech laboratory near Stanford
 - The QB3 East Bay Innovation Center, in West Berkeley, managed by Wareham Development
- **Outcomes:** QB3 reports that from 2005 through 2013 these incubator companies have created hundreds of jobs and raised \$513 million in investments from public and private sources.
- **QB3 Startup in a Box program**, designed to help researchers establish a well-structured company that is ready to apply for federal SBIR grants, has worked with just over 200 companies across California universities (even beyond the UC system) and other institutions.
- To address the funding gap between traditional NIH funding and commercial funding for a startup QB3 created the **Bridging-the-Gap awards program** with private funding from the Rogers Family Foundation aimed at providing \$100,000 awards per year with follow on funding of \$25,000 to groups who meet proposed milestones over the year. A second year of funding can be awarded based on progress made.
- **The QB3-BayBio Accelerator** combines the benefits of membership in BayBio with the startup services network of QB3 so companies can focus on commercialization while getting assistance to achieve “operational excellence.”
- Three of QB3's strategic research alliances have a direct connection to the biopharmaceutical industry:
 - A 3-year partnership with Pfizer, has provided more than \$9 million to over 20 faculty at UC Berkeley, UC Santa Cruz, and UCSF. QB3 initiates collaborations between Pfizer scientists and UC researchers, with funding focused on innovative projects. Pfizer is also interested in seed-stage investments in QB3 incubator network companies.
 - Johnson & Johnson's Corporate Office of Science and Technology has partnered with QB3 to co-fund the QB3 Bridging-the-Gap Awards. This is a unique partnership model because, instead of looking to license technology, J&J wants to build relationships with early-stage entrepreneurs.
 - GE Healthcare loans QB3 major capital equipment such as the InCell 2000 analyzer for high-content drug screening, and offers QB3 scientists a twice-yearly lab course on advanced processing of biological molecules.
- QB3's mission extends beyond research and commercialization to education, where the Institute works to teach primarily graduate students with structured core curriculum and programs in quantitative biology.

California's Innovation Hub Program (iHub). The program is an initiative of the Governor's Office of Business and Economic Development (GO-Biz) and designed to prioritize the commercialization of innovation and technology as an economic development strategy. The program is a platform for the transfer of ideas and technologies discovered in labs and universities to the private sector for commercialization. Further it acts as a

conduit for interaction between government-owned assets with venture-supported startup companies

- Sixteen iHubs currently span California (and the state is considering adding three new hubs) and include some of California's most vibrant economic sectors from agriculture to life science and from medical technology to bio-mass.
- Several of the iHubs include health and bioscience strengths and areas of focus including: SF iHub in San Francisco (Biotechnology), OCTANe iHub in Orange County (includes Biomedical), and iHub San Joaquin (includes Healthcare).

Entrepreneurial Development

CONNECT. Founded in 1985 by the University of California (UC) San Diego, the San Diego Economic Development Corporation, and private sector business leaders, to stimulate the commercialization of science and technology discoveries from the local research institutions and facilitate the creation and growth of technology clusters in San Diego. It continues to focus on mentoring entrepreneurs, fostering strategic partnerships between start-ups and established companies, providing in-depth entrepreneurial training, and introducing early-stage companies to the world of venture-capital finance. CONNECT serves entrepreneurs and companies through workshops, executive forums, and an extensive network of over 500 mentors including entrepreneurs-in-residence through its Springboard accelerator program.

- **Outcomes:** CONNECT's Springboard entrepreneurship program has a 20-year track record with 2,000 companies assisted including 750 that have completed the program since 1993. These companies have raised \$1.5 billion in capital, and since 2005 have created over 4,000 new jobs with 65% of the graduate companies still in business today.

The California Life Sciences Association and its affiliate, the California Life Sciences Institute (CLSI) offer a range of programs focused on advancing life sciences entrepreneurship:

CLSI Fellows Program is designed to help nurture and grow new bioscience incubator businesses in California that are pre-commercial, have fewer than 12 employees, based in the Northern California region and have raised less than \$5 million in funding. For these companies, CLSA offers membership benefits at a discounted rate providing access to the full range of Association benefits, discounts to seminars and other events, and for biopharma companies, access to a database for monitoring deal flow and assisting with market research.

CLSI FAST Advisory Program (Fellows All-Star Team) was established in 2013 to assist startup companies with business advice that leverages the strengths and experience of Northern California's bioscience cluster. Advisory services are provided through experienced entrepreneurs, product and business experts advise new firms to prove their business model and assist

in developing a commercialization strategy. Entrepreneurs who qualify and are selected into the FAST program are part of a full, intensive 8-to-10-week program that culminates in a final "FAST Showcase" appearance before a wide audience that includes potential investors and partners.

- **Outcomes:** Since its inception in fall 2013, FAST program cycles have generated more than 1,800 advisory hours valued at over \$475,000 for the 20 companies who have been through the program. Since participating in FAST, these companies have raised over \$48 million and created 68 new jobs.

CLSI Expert Network, a program offered through the California Life Sciences Institute, provides a no-cost channel for bioscience startups and entrepreneurs to connect with industry professionals on a range of topics to receive expert advice in: business planning, capital formation and partnering, clinical trials, communications, commercial and marketing strategy, facilities, finance, grants, insurance, intellectual property, human resources, leadership/executive teams, legal, operations and administration, outsourcing, pre-clinical planning, recruitment, regulatory affairs, reimbursement and market access, and more. Experts in the network agree to provide up to 10 hours annually of pro bono advice.

CLSA Partnering Day Program. The program is an opportunity for established, global life sciences companies and their emerging counterparts to participate in targeted one-on-one meetings to explore opportunities for co-development and partnering. Partnering Days have featured organizations and companies including Shire, Bayer China, BMS, Novartis, Novo Nordisk, Alexion and the Leukemia & Lymphoma Society.

Bioscience-related incubators and laboratory space. CLSA and CLSI help connect entrepreneurs and companies to business incubators and lab space. The Association provides links to more than 20 such incubators and facilitators on its website.

Biocom's Partner Days. Since 2012, Biocom has facilitated a program that brings large pharmaceutical companies into San Diego for a day of one on one presentations and meetings to consider opportunities to partner, license technologies, and/or to merge or acquire local bioscience companies. Biocom's Capital Development Committee arranges meetings with pre-selected companies that represent good potential fits for collaboration and partnering. Local biotech CEOs are invited in for a networking event and to present information on their company to the executive guests.

Venture Financing

Mission Bay Capital, an independent venture firm, is focused on making early-stage investments in UC bioscience startups. MBC has \$11.3 million under management, 15 investments including 8 UC startups, and to date has had 3 exits. Profits from MBC's successes—the carried interest on investments—are

invested back into the UC system to fund additional MBC funds as well as to contribute to the QB3 endowment.

Biocom Venture Days. Biocom has been facilitating its Venture Days program since 2010 working to connect its member companies with venture capital firms from across the U.S. Biocom's Capital Development Committee invites a small group of investors, typically just three, for a day of one on one, 45 minute presentations and meetings with company representatives in San Diego. The Venture Days facilitator works closely with the investors to find firms that best fit their criteria. Biocom further leverages the investor visits by arranging for local biotech Chief Executives to meet with them for lunch and discussions on the state of the industry.

Advanced Manufacturing Programs and Initiatives

The Amgen Bioprocessing Center at Keck Graduate Institute's School of Applied Life Sciences in Greater Los Angeles was founded in 2004 through funds donated by the Amgen Foundation with a mission to develop and offer bioprocessing teaching and training programs to serve the biopharmaceutical industry in Southern California. The Center and its programs work to bridge the gap between traditional degree courses in the life sciences and engineering to deliver skills required and needed by the bioscience industry. The Center's research takes a collaborative approach with industry and is focused on bioprocessing and scale-up of rDNA-based biopharmaceuticals and next generation biologics. The Center is home to a 3,000 sq. ft. bioprocessing facility and is guided by an industry-focused advisory board.

Economic Incentives

Governor's Economic Development Initiative, Sales Tax Exemption. A statewide sales tax exemption is now in place on all manufacturing equipment and research and development equipment purchases for biotech and manufacturing companies.

R&D Tax Credit. The California Research Credit reduces income or franchise tax based on the following qualifications and specifics:

- You qualify for the research credit if you paid or incurred qualified research expenses while conducting qualified research in California.
- You receive 15% of the excess of current year qualified research expenditures over a computed base amount.

- You may carry over any unused amount to future years until none remains.
- In addition, combined reporting group members may assign the credit to an affiliated corporation that is a member of the same group.

STEM Workforce & Education Programs and Initiatives

The California Life Sciences Institute works to bring together industry with educational institutions to improve STEM education and to advance student awareness of and prepared for life sciences career opportunities. CLSI STEM education programs include the following.

- **CLSI Bio-Community.** CLSI, in an effort to bring together students, educators, and life science professionals, established Bio-Community. The program operates a central website portal where bioscience companies and their employees can identify opportunities to promote STEM education and learning opportunities in California's grade K through post-graduate classrooms, particularly those that are under-resourced and made up of students of diverse socio-economic backgrounds. Bioscience professionals, through volunteer opportunities, are able to inspire students to careers in STEM fields and influence the next generation of innovators.
- **CLSI Bio-Link Equipment Depot.** Northern California bioscience companies can donate their equipment, supplies, and consumables to the Depot for use in local schools, giving them a "second-life" in the classroom.
 - **Outcomes:** The Depot, located near SFO at the City College of San Francisco, will accept high caliber equipment and supplies and provides them to more than 200 teachers and 85,000 students at the high school and college levels for education and hands-on laboratory training.
- **CLSI's Amgen Bay Area BioGENEius Challenge.** CLSI, with support and sponsorship from Amgen, hosts the Bay Area BioGENEius Challenge, the nation's premier biotech research competition for high school students. Projects are presented to industry judges with winners receiving cash prizes and the chance to interact with industry leaders at the annual International BIO Convention.

The California Life Sciences Institute offers a range of other career and professional development opportunities either online or in-person, including:

- **The BioCollaborative**, which offers e-learning and e-communities with a varied set of industry-driven overview and more in-depth courses (4 “tracks” and 25 “modules”) in both science and business for professionals. Two industry certificates can be pursued either in the Life Science Immersion Program or the Industrial Biotechnology Immersion Program.
- **The Biotech Primer** targets non-science professionals whose products or services are oriented toward the bioscience industry. One day, easy to understand primer programs are offered in Biotech and in Drug Development to increase knowledge in scientific concepts.
- **From the Laboratory to Leadership** works to develop the managerial skills of experienced science professionals through a 4-day course focused on everything from team-building and delegation to managing resources and running effective meetings.
 - **Outcomes:** The program has served more than 3,000 managers from 300 life science companies.

The Biocom Institute was created to accelerate biosciences talent development and training with a mission that spans K-12 students and teachers in STEM education, innovative industry-vetted professional development initiatives, and programs focused on mentoring veterans in the biosciences. The Institute utilizes a partnership approach across key agencies, bioscience companies, and educational institutions to develop hands-on programs that stimulate interest in life science careers.

The Biocom Institute offers a Career Center job search portal and professional development opportunities through partnerships and cost discounts to its members. Its educational partners include: 2Connect which provides hands-on workshops and coaching for improved communication and presentation skills; Biotech Primer; and The Leadership Edge which offers the “Laboratory to Leadership” course.

The Biocom Institute Teacher Fellows Program connects K-12 science teachers with life science industry professionals to provide educators with current, first-hand knowledge on what is happening across the life sciences industry today, enabling them to relate real-world examples in the classroom.

Biocom Institute Veteran Career Mentoring Program. The program provides mentoring to veterans in the form of industry exposure, introductions, referrals and life science industry-specific knowledge to assist overall networking and job search capabilities. Upon completing the program, veterans should

be able to decide if the industry is a good fit from a career perspective. Veterans are matched to business functions they are most interested in from business development, marketing, sales, finance, to scientists, engineers, etc. Up to 30 veterans are paired with life sciences industry professionals who themselves have successfully transitioned from the military.

Biocom Institute Introductory Life Sciences Experience (ILSE) Program. The ILSE program is focused on providing a “re-entry” path for 40 to 48 out-of-school youth ages 17-24 into a STEM-related career in the life sciences industry. The students have yet to complete high school and face major barriers to career entry and pathway planning. The program provides free classroom instruction and paid internships in biotechnology that include hands-on lab experience and college level courses as well as work readiness training. Following the internship, the participants receive job placement support and learn about the variety of careers across the life sciences.

The San Diego Festival of Science and Engineering, a STEM-related program of the Institute that seeks to engage and encourage students to become the STEM innovators of tomorrow.

SoCalBio’s Workforce Initiatives include participation and engagement in: the BioGENEius Challenge for high school students, the Biomanufacturing Technician Training program at LA Valley College (see below); sharing regional job openings and opportunities; and holding an annual Workforce Summit for Greater Los Angeles.

LA Valley College-U.S. Dept. of Labor grant to expand bioscience workforce training. Los Angeles Valley College, in partnership with SoCalBio, is one of 12 U.S. community colleges to receive a portion of a \$15 million DOL grant designed to develop and expand the bioscience workforce under the Department’s Trade Adjustment Assistance Community College Career Training effort. The program is focused on developing career pathways in the biosciences for individuals displaced from other industries. The project looks to develop credentials and certificates in lab skills, biomanufacturing and medical devices, and offers “stackable” credentials to help individuals impacted negatively by trade find new jobs in the industry. The LAVC Biotech Bridge Academy has now had multiple cohorts graduate through the program, its latest included 31 students. Graduates received more than 200 hours of vocational training in biotech and biomanufacturing and all of them were interviewed by Baxter Healthcare for biotech positions locally.

- **Outcomes:** Of the 31 recent graduates, 22 had received job offers with Baxter.