Life Sciences Sector

Sector Strategy Update: June 2025

Prepared by Life Science Washington

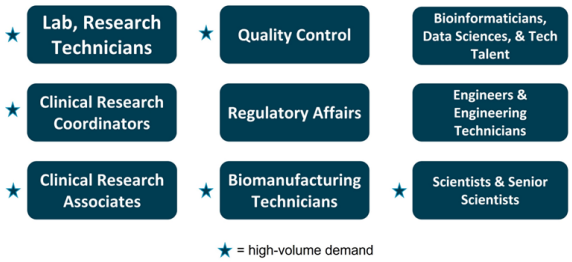
Please describe the greatest workforce needs facing your sector, with a focus on needs that career connected learning strategies can help to address.

As the sector lead for Life Sciences, Life Science Washington submitted its detailed strategy for the state of Washington on May 31, 2023. Washington's life sciences industry, which includes majority jobs in the biotech industry, is anchored by its large and highly "specialized" research, testing, and medical labs subsector, which accounts for nearly half of industry jobs and much of the industry growth, particularly in pre-commercial biotech and other life sciences R&D operations. At the same time, the industry also has a large footprint in medical device manufacturing and sizable and rapidly growing pharmaceutical manufacturing employment. The roles in the life sciences sector in Washington are mostly fall in the pathway jobs and career jobs as defined in the Pathways to Great Jobs in Washington State published in 2017 by Washington Roundtable and Partnership for Learning.

Unlike other industries that might require large numbers of people in similar jobs, the life science industry faces a significant labor shortage, but the shortage is across a wide variety of jobs each with manageable demand. As you will see in the write-up below, these pathway jobs and career jobs feed into talent for each of the high-demand, high-volume roles making it important to strategically build a large workforce pool. As reflected in the report The pathway to 70% Credential Attainment, jobs and roles in life sciences require workforce talent to attend 2-year and 4-year degrees and/or obtain certification to get high paying jobs and have greater opportunities for upward mobility. Hence, our strategy focuses on building or scaling targeted industry-higher education partnerships that target the highest demand jobs while expanding credentials and pathways to specific jobs along with an innovative proposal to leverage the state's unique non-profit research infrastructure to help provide real-world laboratory experience to students. Since many life science companies are small or medium sized, research-focused organizations there's also a significant need for someone (either the intermediary or educational institutions) to coordinate and aggregate industry involvement in programs, internships, and awareness activities.

We conducted detailed industry and occupational staffing pattern analysis for Washington's life sciences industry to inform how the state is unique in its industrial composition and underlying occupational makeup. The detailed occupational employment analyses, considering size, recent growth, relative concentration/specialization, wages, and other factors, in combination with conversations with over 25 Washington-based life sciences companies, were used to identify ***NINE*** "high-demand, high-priority" occupations to inform strategic interventions and investments (Figure 1).

Figure 1: High-Demand, High Priority Life Sciences Industry Occupations



Based on the extensive interviews, we identified the demand for specific occupations and skills, as well as learned about strategic challenges and important workforce dynamics facing Washington life sciences companies, including:

- **A major emphasis by companies and biomedical research institutions is on the need for real-world experience developed by working in labs or on production lines along with knowledge of business operations**. Many companies require several years of experience, for example, for lab technicians, clinical research associates or scientists. This is a challenge and significant barrier for those seeking entry into the industry and important to address through initiatives put forth in the recommendations section.
- **A consistent theme emerged around a major need for career awareness of the industrial life sciences industry**. Students, teachers, and parents are unaware of the breadth of state companies and career opportunities and talent pipelines are suffering from this lack of awareness.
- **There is a lack of clear education and training pathways, credentials, and skills needed for the diversity of jobs in the industry.** The education and workforce system needs to establish a greater diversity of credentials, experiential learning, and recognized pathways (modular layering of on- and off-ramps training) to enable various career paths in response to demand across a wide swath of life sciences employers.
- **There is a need to significantly expand the limited higher education and workforce programs recognized by industry** to meet demand. There are a handful of programs at several community colleges and universities that focus on life science careers, but not enough volume for industry to consider them a primary channel to meet demand.
- **Several barriers to sourcing talent from outside the state have been emphasized by industry,** which are difficult to overcome in the short term, including high cost of living in Greater Seattle, perception of more limited opportunity within the state industry cluster, competition with higher-paying industries, and difficulty incorporating remote work models that are in high demand by top talent.

As a result of this study, we have identified **FIVE** key priorities:

1. **Strategic Priority 1: Fund targeted higher education institutions to scale and expand new programs in partnership with a consortium of companies with similar talent needs to meet the needs of high demand jobs and roles.**

   Recommendation 1.1: Provide support for curriculum development/expansion and

industry engagement at targeted institutions to scale existing programs by increasing capacity.

Recommendation 1.2: Fund initiatives to replicate programs and broaden geographical reach through expansion to additional educational institutions.

2. **Strategic Priority 2: Prioritize and proactively increase career awareness and career support functions (like navigators) to connect life science industry and students.**

   Recommendation 2.1: For K-12 populations across the state, engage in career awareness to help students understand the diversity and accessibility of career opportunities within the life science industry. Programs like "You can be a Scientist!" developed by Bristol Myers Squibb offers such exposure.

   Recommendation 2.2: For 2-year and 4-year degree populations, fund career navigator positions and target appropriate student/learner segments at targeted higher education institutions to enhance career awareness and to help students understand and prepare for the diversity of career opportunities within the life science industry.

3. **Strategic Priority 3: Advance diversity equity and inclusion (DEI) efforts through internships across the industry that provide personnel, resources, and support to expand diversity within in-state workforces.**

   Recommendation 3.1: Fund non-profit education partners to prepare students for the Life Science Washington Scholars Internship Program to advance DEI within the life sciences industry by supporting, preparing, and matching diverse talent to Washington companies.

4. **Strategic Priority 4: Develop a Technical Residency Program by leveraging state-of-the-art laboratory infrastructure at non-profit research institutes that can provide hands-on experiential learning and development of diverse market-ready life science skills.**

   Recommendation 4.1: Partner our colleges with our world-class non-profit research institutes to create a multi-year Technical Residency program that combines a degree or credential program with real-world laboratory experiences and alleviate financial barriers to increase employer participation.

5. **Strategic Priority 5: Maintain Sector Intermediary to coordinate and scale industry involvement in awareness, education, and workforce initiatives.**

   Recommendation 5.1: Since most life science companies are small to medium sized, research-focused companies, they lack the internal resources or scale to engage productively with education and workforce partners individually. A sector intermediary is needed to connect companies with various workforce related programs to facilitate participation in curriculum development, internship programs, career awareness activities, and coordinate new initiatives like technical residency.

The Life Science industry offers individuals a diverse career path depending on the

individual's interest. The life science ecosystem in Washington has a strong focus on Research and Development seeking individuals keen on bench work, a combination of mature companies and maturing companies provide opportunities for business development roles, quality control and regulatory roles. Roles that require pre-clinical and clinical trial talent to realize the impact of various diagnostics, therapeutics and medical devices innovation. The career pathways intertwine and, depending on specialization or generalist roles, offer individuals the flexibility to transition careers depending on passion, financial needs and career stability needs. Building higher education capacity and maintaining it at scale with student capacity will help reduce the talent deficit.

Between now and June of 2025, what are your sector's 3-6 occupations that are highest-priority for building supportive career connected learning pathways? Please focus on occupations that lead to economic self-sufficiency.

The below mentioned roles are interconnected with each other and offer growth opportunities for individuals as they look to make transitions during their career journey in Life Sciences.

- Lab Research Technicians & Clinical Research Coordinators
- Biomanufacturing Technicians
- Quality Control Associate and Scientist

For <u>each</u> of the occupations identified above, please provide the information below to help inform pathway development efforts and investments.

Occupation: Technicians (Lab, Biomanufacturing)	**Sub-sector:** Research and Development
Average wage: $29.65/hour (Range: $17 - $51.48/hour)	
Which skills/competencies do employers use as a benchmark to hire someone in this occupation? **<u>Technical Skills:</u>** ● Aseptic hygiene training ● Analytical skills ● Sample preparation and testing ● Data Collection ● Instrumentation management and experience ● Understand basics of molecular biology, instrumentation techniques, ● Develop sterile solutions and media prep ● Dosage Formulations ● Specific instrumentation experience e.g. High Performance Liquid	**Which credentials do employers cite as a valuable benchmark to hire someone in this occupation?** **<u>Formal Certificate/degree-based Training:</u>** ● Prerequisites in Biology, Chemistry and Math is expected along with ○ 2-year Associates degree with hands-on laboratory experience. ○ 4-year college degree in STEM with Biology or molecular biology focus with hands-on laboratory experience. Typically focusing on multiple years of course work in Chemistry, Biology, Statistics etc. ○ UW Bothell's CBIT will launch

Chromatography (HPLC), UV-Visible Spectroscopy
- Familiarity with experimental design and selection of treatment versus control groups and positive/negative controls
- Documentation preparation: Develop standard protocol development to ensure repeatability
- Bioethics, basic statistics
- Conduct literature review to support experimental efforts

Professional Skills:
- Critical Thinking
- Attention to detail and methodical approach to projects
- Organization
- Communication Skills
- Time management skills:
  - Meeting project deadlines
  - Planning for time sensitive experiments
  - Managing experimental verification for instrumentation usage
- Ability to train others e.g. Technician level 1, undergraduate assistant etc.
- Presentation Skills
- Computer skills like familiarity with Microsoft suite for data entry, data processing, and maintaining and updating scientific methodology, write reports and writing skills for scientific publications
- Ability to manage and juggle multiple projects
- Willingness to learn
- Applying knowledge from classroom to problem solving contexts within laboratory settings
- Vendor relationships
- Self-advocacy

its Biomanufacturing Technician Credential end of June 2025
- Biotech Lab Specialist - 2-year Associates degree and/or 1 year certification offered at Shoreline Community College is recognized by most life science companies in Washington. Spokane Community Colleges in partnership with Jubilant HollisterStier.

On the job Hands-on Training:
- 2-year or 4-year degree in STEM with hands-on lab experience in non-profit lab settings like University of Washington, Seattle Campus, Fred Hutch, Institute of Systems Biology, Allen Institute etc.

Please describe possible career progression opportunities for this occupation:

A Lab Technician can pursue multiple pathways and feed into the additional high demand high volume roles like Scientist, and Quality Control.
- Technical Pathway: Quality Control Scientist, Scientist, Scientist 1,2,3; Senior Scientist.

- Higher Education Pathway: Graduate with a PhD and transition into the workforce at a senior role as a team manager. Receive an MBA and transition into Operations, Business Development or Sales.

Please share the data, employer feedback, and/or Regional Network feedback that helped you identify this as a high-priority occupation:

Based on the cumulative data we collected from LightCast from 2020 - 2022, we learnt that there are over 1000 Lab Technicians roles available in various life science companies. Employers shared that this role is critical within companies that have a strong research and development as well as operation focus and requires individuals with skills as mentioned above. Lab technicians support various lab needs and they are required to be technically sound in this supportive role.

Please describe the top barriers employers have identified to hiring for this occupation:

- Difficulty in retaining talent due to high demand for this role. Individuals with a few years of experience are poached by other bigger companies, impacting the efforts of the smaller and mid-sized organizations. Need to build capacity for workforce programs that will sustain the talent pool and backfill roles.
- The Lab Launch program piloted by Fred Hutch has seen a steady increase in participation from students. However, for the program to meet its maximum capacity, the financial model for this program will have to be considered from the perspective of the employer. This will encourage additional non-profit research institutes to join as a coalition. The anticipated 2025 federal cuts to non-profit research institutes will impact such programs as majority of the overheads support such initiatives.

Please describe the type of programs or approaches employers have found helpful in hiring for this occupation:

- Shoreline Community College's Biotechnology program - The Lab Biotechnology Specialist is seen as a sought after program for recruiting Lab Technicians. This is a 2-year AA program that has seen companies recruit students. Some companies that have recruited are Inventprise, BMS, Pfizer, Just Evotec.
- Shoreline's 10-week Biomanufacturing program has been expanded to Spokane based on the hiring needs of Jubilant HollisterStier. This is an example of how based on the employer demands and program was replicated in the East side of Washington.
- Fred Hutch's Lab Launch program is the first of its kind of program that features the employer i.e. Fred Hutch that is driving the hands-on training integrated with Shoreline Community College's Lab Biotechnology Specialist program. This program is a pathway for individuals from each of Lab Launch cohort to be considered for interview for the Lab Technician role and transition into the workforce.
- Individuals who have been trained at non-profit research institutes like Fred Hutch, Institute of Systems Biology, Allen Institute, Benaroya Research Institute are often sought by for-profit companies.
- UW Bothell's Center for Biotechnology Innovation and Training (CBIT) will be launching its Biomanufacturing Technicians curriculum in June 2025, that will provide credentialing for 4-year graduates who are seeking to transition into Biotechnology.

Occupation: Quality Control/Regulatory Affairs	**Sub-sector:** Clinical Trials, Biomanufacturing and Medical Devices.
- **Average wage: $/hour 40.81 (Range: $17 - $51.48/hour)**	

Which skills/competencies do employers use as a benchmark to hire someone in this occupation?
 	
<u>Technical Skills:</u>
● Aseptic hygiene training
● Analytical skills
● Documentation preparation and management: Develop standard protocol development to ensure repeatability
● Sample preparation and testing
● Stability Testing
● Testing against specifications
● Testing packaging materials
● Data Collection
● Instrumentation management and experience
● Understand basics of molecular biology, instrumentation techniques,
● Develop sterile solutions and media prep
● Familiarity with experimental design and selection of treatment versus control groups and positive/negative controls
● Bioethics, basic statistics
● Conduct literature review to support experimental efforts
 	
<u>Professional Skills:</u>
- Critical Thinking
- Attention to detail and methodical approach to projects
- Organization
- Communication Skills
- Time management skills:
  - Meeting project deadlines
  - Planning for time sensitive experiments
  - Managing experimental verification for instrumentation usage
- Ability to train others e.g. Technician
	Which credentials do employers cite as a valuable benchmark to hire someone in this occupation?
	
	<u>Formal Certificate/degree-based Training:</u>
	● Prerequisites in Biology, Chemistry and Math is expected along with
	  ○ 2-year Associates degree with multiple years of industry based hands-on laboratory experience.
	  ○ 4-year college degree in STEM with Biology or molecular biology focus with hands-on laboratory experience. Typically focusing on multiple years of course work in Chemistry, Biology, Statistics etc.
	  ○ UW Bothell's CBIT will launch its QA/QC Credential end of June 2025
	● Biotech Lab Specialist - 2-year Associates degree and/or 1 year certification offered at Shoreline Community College is recognized by most life science companies in Washington.
	● 10 week - Biomanufacturing Certificate at Shoreline Community College.

level 1, undergraduate assistant etc. - Presentation Skills - Computer skills like familiarity with Microsoft suite for data entry, data processing, and maintaining and updating scientific methodology, write reports and writing skills for scientific publications - Ability to manage and juggle multiple projects - Willingness to learn - Applying knowledge from classroom to problem solving contexts within laboratory settings - Vendor relationships - Self-advocacy	

Please describe possible career progression opportunities for this occupation:

A Quality Control can pursue multiple pathways

- Technical Pathway: Quality Control Scientist, Senior Quality Control Scientist, Development Scientist, Quality Control Supervisor, Senior Quality Manager, Validation Specialist, Senior Development Scientist

Please share the data, employer feedback, and/or Regional Network feedback that helped you identify this as a high-priority occupation:

With every two lab/biomanufacturing technician roles there is a need for one Quality Control role. This need was expressed by multiple research and development and manufacturing based companies.

Please describe the top barriers employers have identified to hiring for this occupation:

The lack of Lab technician role impacts the feeding into this role as many individuals do not see this as an opportunity. The attention to detail and need for scientific rigor has been lacking as the role often requires technical troubleshooting and is training that companies must take upon themselves as an investment in the role and individual. This role typically requires an individual to have 4-year degree in a relevant field to be a preferred hire.

Please describe the type of programs or approaches employers have found helpful in hiring for this occupation:

- Shoreline Community College has been a viable program for these roles once the individual with a 4-year degree has a certification from the Biotechnology program.
- Companies have internally trained individuals as they have looked to transition and grow within their careers.
- Since the publication of the updated 2024 sector strategy, the University of Bothell's Center for Biotechnology Innovation and Training (CBIT) received Sector Accelerator funding. CBIT is developing a curriculum in partnership with Industry partners to support FIVE out of the NINE high demand high volume roles. Regulatory affairs and

Quality Control is one of these roles being addressed as part of curriculum development. They will be launching a Biomanufacturing Technician and QA/QC credential in June 2025.

Occupation: Scientist and Engineering	**Sub-sector:** Research and Development Clinical Trials, Biomanufacturing and Medical Devices.
- **Average wage: $59.33/hour**	

Which skills/competencies do employers use as a benchmark to hire someone in this occupation?

<u>Technical Skills:</u>

- Aseptic hygiene training
- Analytical skills
- Documentation preparation and management: Develop standard protocol development to ensure repeatability
- Sample preparation and testing
- Stability Testing
- Testing against specifications
- Testing packaging materials
- Data Collection
- Instrumentation management and experience
- Understand basics of molecular biology, instrumentation techniques,
- Develop sterile solutions and media prep
- Familiarity with experimental design and selection of treatment versus control groups and positive/negative controls
- Bioethics, basic statistics
- Conduct literature review to support experimental efforts

<u>Professional Skills:</u>

- Critical Thinking
- Attention to detail and methodical approach to projects
- Organization
- Communication Skills
- Time management skills:
  - Meeting project deadlines
  - Planning for time sensitive

Which credentials do employers cite as a valuable benchmark to hire someone in this occupation?

<u>Formal Certificate/degree-based Training:</u>

- Prerequisites in Biology, Chemistry and Math is expected along with
  - 2-year Associates degree with hands-on laboratory experience.
  - 4-year college degree in STEM with Biology or molecular biology focus with hands-on laboratory experience. Typically focusing on multiple years of course work in Chemistry, Biology, Statistics etc.
- Biotech Lab Specialist - 2-year Associates degree and/or 1 year certification offered at Shoreline Community College is recognized by most life science companies in Washington.
- 10 week - Biomanufacturing Certificate at Shoreline Community College.
- Graduate programs nationally

experiments - Managing experimental verification for instrumentation usage - Ability to train others e.g. Technician level 1, undergraduate assistant etc. - Presentation Skills - Computer skills like familiarity with Microsoft suite for data entry, data processing, and maintaining and updating scientific methodology, write reports and writing skills for scientific publications - Ability to manage and juggle multiple projects - Willingness to learn - Applying knowledge from classroom to problem solving contexts within laboratory settings - Vendor relationships - Self-advocacy	

Please describe possible career progression opportunities for this occupation:

Scientists and Engineer can pursue multiple pathways
- Technical Pathway: Scientist 1,2,3; Senior Scientist; Supervisor; Principal Investigator, Department head.

Please share the data, employer feedback, and/or Regional Network feedback that helped you identify this as a high-priority occupation:

Washington state's focus is on the research and development space. The employers stated the need for research and testing as being critical in the initial phase of platform or product development during pre-clinical trial phases to support the advancement of products to become clinically relevant for FDA approval.

Please describe the top barriers employers have identified to hiring for this occupation:
Lack of local talent has meant either poaching talent from the smaller, mid or large-sized companies, or importing talent nationally which has impacted their hiring and retention portfolio. The lack of student capacity and enrollment in higher ed has meant fewer graduates interested in transitioning into the workforce and not able to meet the workforce needs.

Please describe the type of programs or approaches employers have found helpful in hiring for this occupation:
University of Washington, Seattle, Fred Hutch, Allen Institute, and Institute of Systems Biology have been typical resources for hiring talent.

Since the publication of the updated 2024 sector strategy, the University of Bothell's Center for Biotechnology Innovation and Training (CBIT) received Sector Accelerator funding of ~

$200k. CBIT is developing a curriculum in collaboration with Industry partners to support FIVE out of the NINE high demand high volume roles. Scientists and engineers are one of these roles being addressed as part of curriculum development.

LSW has also been closely advising UW Seattle's Chemistry Department, WSU, Pullman's Department of Chemical Engineering and Bioengineering program in terms of aligning with the needs of Industry and develop an Engineering talent pool that will transition into the life sciences workforce especially medical devices.

For each region below, which workforce education & training programs are *effectively* meeting employer needs, or could effectively meet their needs with adjustment or expanded capacity? Where relevant, please color code responses to reflect their relevance to specific occupations.

Please provide your color-coding key below:
High Industry Engagement
Needs Industry Engagement
Career Launch Endorsed
Career Prep
Career Explore
Post-Secondary

Capital	

East	• **Gonzaga University**
	  ○ Recently added Post-secondary program in Biomedical Engineering
	• Spokane Community College
	  ○ Needs funding for Launch
	  ○ Needs Industry Engagement
	• Eastern Washington University, Biotechnology
	  ○ Needs Career Prep funding
	  ○ Needs Industry Engagement
	• **Washington State University, Pullman**
	  ○ Needs funding for Launch
	  ○ Needs Industry Engagement

King & Pierce	• Shoreline Community College - Biotechnology Program
	  ○ Has career launch endorsement
	  ○ High Industry Engagement - Advisory Board
	  ○ Needs additional Industry Engagement for Internship pathways
	• UW Bothell
	  ○ Needs funding to sustain the on-campus industry model
	  ○ High Industry Engagement - Advisory Board
	• UW, Seattle
	  ○ Needs additional Industry Engagement for Internship pathways

Mid-Columbia	• Washington State University, Tri-Cities - Immunology and Biology ○ Needs Industry Engagement
North Central	

Northwest	• Edmonds College - Needs funding
South Central	
Southwest	• Washington State University, Vancouver - Neuroscience ○ Needs Industry Engagement

Please describe the types of employers in your sector who are most eager to participate in career connected learning to meet their workforce needs. Why are these types of employers interested in participating in career connected learning, and what type of career connected learning programs are most valuable to them?

For Life Sciences we have a diversity of employer types, for profit companies – small, medium and large, non-profit research institutes, start-ups. The Washington State's life sciences ecosystem is research and development focused on biomanufacturing operations associated for maturing and mature companies.

- The non-profit research institutes are keen to grow the workforce pool due to high demand in research support roles. They work closely with higher education programs to align education with hands-on training. The research institutes have state-of-the-art lab facilities and provide hands-on experience to train the workforce talent. Additionally, other life science companies value the training offered by non-profit research institutes but with loss of talent to for-profit companies, the research institutes need to build a large talent pool to backfill these roles.

- Companies recognize the need for growing local talent and want to minimize poaching from other local companies. Based on these needs, companies have been participating early in the training phase by providing input on curriculum that needs to align with career connected learning to reduce the onboarding time as well as build relationships to access talent.
    - Career Launch Model: Shoreline Community College's Biotechnology Program is Career endorsed and has various companies participating in the Career Launch program for Lab Biotech Specialists.
        - These companies are. BMS, Pfizer, Inventprise, Pacific Northwest Research Institute.
        - SCC is partnering with Fred Hutch to train Lab technicians as part of the LabLaunch program.
        - The recent WRF funding for Internship fellowship has seen involvement from Sana Biotechnology BMS, Pluristyx.
    - On campus Internship: UW Bothell's CBIT program is a 4-year program and is working with companies that are in need for talent with 4-year degree in STEM. CBIT is working with its Industry curriculum panel to identify gaps that exist in their curriculum and integrating appropriate hands-on training that aligns with industry needs. The program is lowering barriers for small and mid-size companies to participate as well as scale internship opportunities for large companies that can leverage the state-of-the-art facilities at UW Bothell. The participating companies are Pfizer, BMS, Just Evotec, Pluristyx, AGC

Biologics. CBIT through cross-departmental collaborations with Physics, Engineering, Computer Science, Biology and Chemistry is identifying skill gaps to create a holistic curriculum that supports a complex curriculum for the life sciences companies.

- Industry led career connected learning – Jubilant HollisterStier has partnered with Shoreline Community College to adapt and replicate the 10-week Biomanufacturing certificate to meet their hiring needs.

Between now and June of 2025, where is there regional momentum to support pathway development in this occupation?

For each region listed, please describe:

1. *Key **momentum factors** (e.g., interested employers, high-priority for Regional Network, opportunity to improve equitable access, opportunity to scale existing programs, portions of CCW pathway already built)*
2. ***High-potential opportunities** to support pathway development*
3. *Is supporting those high-potential opportunities a **shared priority** across SL and RN?*

- **King & Pierce**:
  - Key Momentum Factors: UW Bothell's Center for Biotechnology Innovation and Training (CBIT) is developing curriculum to support five of the nine high demand high volume jobs that require 4-year degree for life sciences roles. CBIT is working in partnership with 16 life sciences companies to develop industry-aligned curriculum and identify on-campus internships to offer hands-on training to the students of UW Bothell.
    Fred Hutch launched its Lab Launch program in partnership with Shoreline Community College's (SCC) Biotechnology program which is Career Launch Endorsed. The program trains students as Lab Technician at Fred Hutch after they go through the education component at SCC. The selected students are confirmed an interview for lab technician roles at Fred Hutch. This is a pilot program aligning with the Technical Residency model that was proposed in the life sciences strategy.
  - High-potential opportunities: Large presence of small, mid-size and large companies keen to participate in solutions to workforce needs. There is deep interest in being a resource for education development, curriculum and program advisory. The higher education partners and non-profit research partners are in this region and currently the source for talent and are key to creating pathways to scale the talent pool.
  - Shared priority: The Industry partners are part of advisory boards at UW Bothell's CBIT and Shoreline Community College and provide insights about curriculum needs as well as are thought partners in providing information on opportunities like internships and roles for qualified individuals. The missing piece to build this workforce pathway is support for curriculum development that will be needed to support faculty hours in addition to the teaching workload.
- **East**:
  - High Potential Opportunities: Jubilant HollisterStier (JHS) at Spokane recently built a third Biomanufacturing facility to meet the growing need for materials for Biomanufacturing. The new facility will require an additional 200 biomanufacturing talent over the next two years. LSW, facilitated roundtable

discussions between JHS and Shoreline Community College's Biotechnology Program lead to adapt their 10-week Biomanufacturing Specialist certificate as a training program to support capacity building. Additionally, the Regional Network director and Career Connected Learning coordinator have been approached to identify learner population to build talent capacity. This is well aligned as with the career connected learning strategies to bring Industry and workforce partners to solve the supply issue of the talent pool. There is a need to build teaching capacity and the partners are looking to connect with Community College of Spokane to maintain teaching capacity to meet the workforce needs.

- Share Priority: the Regional Network director and Career Connected Learning coordinator for East have been approached to identify learner population to build talent capacity. They are working with JHS to identify key population segments.

What is needed to increase participation of BIPOC students in your sector's high priority occupations? To increase participation of students from rural areas? Which programs are doing this well?

The industry has both a strategic and immediate talent need to advance diversity, equity, and inclusion or "DEI", in part through student and early career connections. The life sciences industry in Washington is keen to diversify its workforce to encourage varied approaches to innovative problem solving. As complexities are increasing within research and innovation spaces, it is becoming evident that there is a need for increasing representation within the life sciences ecosystem. The lack of accessibility to industry, career awareness, wraparound support, mentorship, and expectation of fitting into the system has impacted representation of underserved and diverse communities. Additionally, the prevailing narrative that students need to pursue higher education as the sole path to career success in life sciences has deterred numerous individuals, resulting in systematic under representation for certain demographic groups and populations.

The persistence of interpersonal and structural inequities faced by underserved and underrepresented communities has impacted representation within the workforce. The life science industry has shown their understanding of the urgency of the issue and is involved at grassroots levels in improving representation. Increasing opportunities for individuals from underserved populations requires a dedicated program that offers accessibility to opportunities, financial and infrastructure support, multiple professional and programmatic mentors to navigate various stages of personal and professional development. To overcome these issues there needs to be sustainable long-term support for such programs that support underserved communities in mitigating inequities, connecting them to various career and internship opportunities, and tracking longitudinal growth of individuals.

Systemic changes occur when grassroots initiatives are in alignment with top-down initiatives, and identifying common ground becomes critical. Life Science Washington (LSW) facilitated a DEI Workgroup that over a span of 6 months developed best practices for Life Sciences internship programs and adapted learnings from Life Science Cares Internship program in Boston to develop the Life Science Washington Scholars Internship Program (LSWSIP). LSW has played a critical role in supporting and advocating for life science companies and

providing connections to build a healthy life science ecosystem and has over 500 life science companies as members. In the State of Washington, the Washington State Opportunity Scholars (WSOS) provides scholarships and support services to eligible candidates from underserved and underrepresented communities to pursue education and provide career guidance. We recommend that WSOS receive support to build out the Life Science Washington Scholars Internship Program (LSWSIP) with Life Science Washington.

The life science industry has shown urgency and is involved at a grassroots level in improving representation as companies and industry leaders realize the value of diverse perspectives towards problem solving and innovation. The critical aspects to improving representation relies on (1) identifying a pool of candidates, (2) having operational capacity involving recruiting, providing career and professional development training, (3) matching individuals within the cohort with appropriate life science industries, and (4) tracking the career paths of individuals.

- WSOS will like to develop the program where we select a cohort of 15-20, 3rd year (juniors) learners pursuing a 4-year degree, provide them with career guidance support, and work with LSW to match them with industry mentors in partnership with LSW to prepare them for internship opportunities. This program is being proposed as a pilot, but it will be important to provide regular support for the coordinator(s) to be able to manage multiple cohorts, provide longitudinal study tracking individuals and eventually scale the program to over 100 scholars. DEI initiatives require long-term support at such grassroots level to mitigate inequities and following the career journey of individuals will provide evidence-based support to continually refine the program.

- Support for Industry to develop Career Exploration pathways in partnership with school districts/regions and higher ed partners. Bristol Myers Squibb in partnership with Seattle School districts has proposed a Career Exploration pathway “You can be a Scientist”, which is focused on tours, staff presentation and involvement.

- Need for wrap around support like housing stipend for internships will be critical for individuals interested and qualified from regions outside of Seattle. Most of the Life Sciences companies are based in the Seattle and Greater Seattle area, which means the high cost of living and lack of affordable housing adds to a barrier for individuals from rural and underserved populations. While some roles might afford remote working, most of the lab-based research requires individuals to be physically present. While Industry is open to providing internships, additional wrap around support would reduce the barriers for qualified talent not based in Seattle.

What overarching strategies do you recommend to support pathway development for the highest-priority occupations in your sector?

As the Sector lead for Life Sciences, we put forward recommendations in our strategy (submitted on May 31, 2023) to focus on building higher ed capacity and have a coordinated career awareness approach between life science industry and school districts. While Industry support and demand exists, higher ed capacity needs to be supported and built. This will require funding support for workforce programs that are and have developed industry aligned curriculum. Industry partners have mentioned in various conversations specific programs that

they support and the need to scale them to capacity. These programs will be a template for expansion of the program across the state to meet the growing needs for above mentioned high demand high volume roles.

1. **Fund targeted higher education institutions to scale and expand new programs in partnership with a consortium of companies with similar talent needs to meet the needs of high demand jobs and roles.**
    a. **Recommendation 1.1:** Provide support for curriculum development/expansion and industry engagement at targeted institutions to scale existing programs by increasing capacity. Programs across the state which serve various parts of the life sciences ecosystem have differing needs which can be addressed through targeted investments to scale existing program activity. Some targets for significant state investment should include:
        i. The Shoreline programs are seen as highly effective and considered well resourced, but output needs to be scaled dramatically. Discussions with companies indicate a near-term need for hundreds of graduates from the combined AAAS and certificate programs—levels that far exceed those generated today. The biotechnology program at Shoreline Community College is a career launch endorsed program that offers (1) 2-year degree and a 1-year certification as Lab Biotechnology Specialist, (2) 10-week Biomanufacturing program typically suited for post baccalaureate learners, and (3) Pilot program with Fred Hutch that includes coursework at Shoreline Community College and hands-on lab experience at specific labs in Fred Hutch. Funding through Career Launch programs and Career Prep will help the program reach capacity as it will be essential to scale graduates from the program. LSW's strategy and roundtable discussions catalyzed funding support for SCC by supporting them in acquiring Washington Research Foundation (WRF) funding in the form of student fellowship for their graduates to leverage their Career Launch endorsed programs and increase industry engagement for their students. The fellowship offers opportunities for Industry to offer internships to students by lowering the financial barriers faced by industry especially small companies. As the sector lead we led the Presidential Task force and recommended the program advertise Biotechnology program to other STEM related programs like nursing. For the first time in the program's history, they have had maximum enrollment for their Lab Specialist program through the combination of an Advisory board and Internship support from WRF.
        ii. The Center for Biotechnology Innovation and Training (CBIT) at UW-Bothell received the Sector Strategy Accelerator funding for one-year in July 2024. It needs sustained multi-year support to expand curriculum, hire faculty and launch industry partnerships to alleviate the workload on existing faculty and staff who are stretched thin. CCW should invest to enable the full build-out of the Center, in particular supporting expansion of the leadership team which is expected to be the primary driver of industry partnerships as well as the physical place-based infrastructure for training and education. Funding in the form of Career Prep will help develop the curriculum and will potentially become Career Launch Program within 12-18 months of curriculum development. The program has seen increase in interest from company

representatives which is helping grow the awareness of CBIT.

iii. The University of Washington has numerous critical programs for the life sciences industry, serving as the state's primary developer of talent in 4-year and graduate degrees aligned with traditional life sciences skill sets. Because its graduates are seen as high quality, there is often intense competition for a limited supply both with other STEM-intensive industries as well as amongst companies within the life sciences industry. CCW should invest to ensure UW-Seattle and UW-Bothell have the resources required to scale up in the near term, in particular significant investments to allow for cluster hires of faculty and consistent faculty salary resources in key life sciences-related areas such as bioengineering and bio- and healthcare informatics to improve degree production. Conversations with UW stakeholders noted that there are significant supply constraints facing the ability of the university to produce graduates, with potential talent sometimes flowing to universities in neighboring states due to lack of capacity. Stakeholders also noted the potential for investment to provide funding for internal competitive awards designed to expand multidisciplinary areas critical to the future of life sciences such as large-scale healthcare and bioinformatics data management, medical imaging, and other digital health-related applications. Funding through Career Prep.

iv. Washington State University (WSU) is an untapped source for talent. As mentioned previously, the university offers several 4-year degree programs aligned with industry roles. As mentioned in the table above, the multiple WSU campuses provide opportunities through Career Awareness programs to build and increase industry engagement and increase hiring pool. LSW has been advising WSU Pullman on appropriate partnerships with Industry that will help build the talent pool especially in the engineering field. To expand the talent pool, it would be vital to create a statewide recruitment strategy that increases the visibility and awareness of talent graduating from WSU.

v. Additionally, as early-stage start-ups start to grow and transition into clinical trials and manufacturing phases of therapeutics and device development, there will be a growing need for new programs to sustain the talent supply needs.

b. **Recommendation 1.2:** Fund initiatives to replicate programs and broaden geographical reach through expansion to additional educational institutions.

i. Fund Eastern Washington University, Spokane Community College to scale and expand programs in partnership with a consortium of companies to develop an industry focused curriculum. Jubilant Hollister-Stier (JHS) at Spokane built a third Biomanufacturing facility to meet the growing need for materials for Biomanufacturing. The new facility will require an additional 200 biomanufacturing talent over the next two years. JHS is self-supporting this initiative and has adapted Shoreline Community College's 10-week Biomanufacturing certificate program. It aligns well with the career connected learning strategies to bring Industry and workforce partners to solve the supply issue of the talent pool. This will need support in the form of Career Prep and/or Career Launch to build student and faculty capacity. Life Science Washington (LSW) connected Shoreline Community College's Biotechnology

Program lead with JHS' program lead and facilitated the development of the industry aligned curriculum. Additionally, LSW will work to increase student recruitment within the various 2-year and 4-year programs in the region to increase awareness of employers in the region. The need for expansion of the program and identifying key regional partners to build student capacity and higher ed partners for teaching capacity is critical to increase talent supply.

ii. UW Bothell's CBIT program also provides a unique opportunity for Industry partners and faculty to work closely, and devise project based and Capstone programs that will provide learners with opportunities to get industry related experience within the classroom set up as well as expose Industry impact on individuals and faculty. This requires two different approaches to awareness – (1) awareness of the program to Industry partners, through regular tours of the facilities. CBIT has been hosting Industry tours on the third Thursday of every month since June 2024, (2) monthly/regular career panels and Guest speaker events that expose students and faculty to opportunities in the life sciences. The Industry-Education partnership will provide a solid foundation for increasing awareness within the K-12 space for teachers, counselors and students to align with skills needed to transition into Life Sciences.

2. **Prioritize and proactively increase career awareness and career support functions (like navigators) to connect life science industry and students.**

Recommendation 2.1: For K-12 populations across the state, engage in career awareness to help students understand the diversity and accessibility of career opportunities within the life science industry. It is becoming increasingly evident that career awareness at the K-12 phase is essential. Since the submission of our strategy, we have been connecting our Industry members with K-12 and Higher Education programs. As a member organization, LSW is partnering with Washington Alliance for Better Schools (WABS) to increase awareness of companies in the form of Company tours with clusters of schools from School districts. LSW forged a partnership with the Allen Institute and WABS to host 10 tours over the next year. They have already hosted 2 tours and have modified activities to meet the needs of students' baseline knowledge. Allen Institute will host 7 school districts – Highline, Renton, Edmonds, Northshore, Seattle, Bellevue and Lake Washington and would eventually expose about 300 students to opportunities in Life Sciences. Allen Institute was able to support funding for catering and transportation for students and will continue to support WABS for the 10 tours planned. These tours are being extended to education programs that support Biotechnology degrees and certifications in extending the awareness of education programs that support training of talent in Life Sciences. We are seeking more centralized regional support to connect and increase awareness of Life Sciences.

Recommendation 2.2: For 2-year and 4-year degree populations, fund *career navigator* positions at targeted higher education institutions to enhance career awareness and to help students understand and prepare for the diversity of career opportunities within the life science industry. As detailed above in the sections of high demand-high volume jobs entry-level roles open vast diverse career transitions within Life Sciences. Due to the interconnectedness and non-linear pathways in Life

Sciences there is a need for *career navigators* to educate and guide talent and their support structures i.e. parents, teachers and counselors about careers in Life Sciences rather than specific role-filling jobs. These *career navigators* act as recruitment agents for the ecosystem as well as resources to attract individuals from underserved communities.

3. **Strategic Priority 3: Advance diversity equity and inclusion (DEI) efforts through internships across the industry that provide personnel, resources, and support to expand diversity within in-state workforces.**

   Recommendation 3.1: Fund non-profit education partners to prepare students for the Life Science Washington Scholars Internship Program to advance DEI within the life sciences industry by supporting, preparing, and matching diverse talent to Washington companies. For more details on this see response to question focusing on strategies to increase participation of BIPOC students.

4. **Strategic Priority 4: Develop a Technical Residency Program by leveraging state-of-the-art laboratory infrastructure at non-profit research institutes that can provide hands-on experiential learning and development of diverse market-ready life science skills.**

   Recommendation 4.1: Partner our colleges with our world-class non-profit research institutes and interested companies to create a 2-year Technical Residency program that combines a degree or credential program with real-world laboratory experiences. Shoreline Community College partnered with Fred Hutch ran a pilot program with running start high school students and have identified a curriculum that might support hands-on training. This is now being offered to 2-year degree pursuing individuals to create a hands-on training pathway with the appropriate funding model. Fred Hutch has increased the participation of various Fred Hutch research faculties to establish their Lab Launch program. Fred Hutch is running a self-funded pilot program LabLaunch that supports administration, faculty, lab facilities, staff time, financial support for students in the form of stipend as well as wrap around support in the form of travel allowances. During our conversations with Fred Hutch, we learned that for this program to be scaled, there needs to be a way to offset financial needs by (1) providing infrastructure and staff support, (2) increase participant awards, (3) travel awards for students as wrap around support. Fred Hutch has added Bellevue College as its other college partner to expand its student outreach. One funding model that might help support this program is the **Enrollment Funding** whereby the Shoreline Community College receive the enrollment funding for two years which would involve the student FTEs to receive the education at Shoreline Community College and gain hands-on experience at participating non-profit research organizations. This support would help alleviate the self-funding model that the non-profit research institutes are currently relying on to increase the scale and provide sustainability to the program. To increase the talent pool of Lab Technicians, the program will have to be scaled and expanded to include a consortia of non-profit research institutes and increase the participation of the number of research labs.

5. **Strategic Priority 5: Maintain Sector Intermediary to coordinate and scale industry involvement in awareness, education, and workforce initiatives.**

Recommendation 5.1: Since most life science companies are small to medium sized, research-focused companies, they lack the internal resources or scale to engage productively with education and workforce partners individually. A sector intermediary is needed to help companies participate in curriculum development, internship programs, career awareness activities, and coordinate new initiatives like the technical residency. Life Science Washington is coordinating an annual career awareness portfolio that would connect above mentioned higher education programs with industry partners in the form of Industry Career Panels, in-class Guest speakers, Career Fair, Career and Professional Development workshops. We have identified the needs of our 2-year and 4-year higher education partners and will identify interested partners for each of the above-mentioned programs.

Please describe the types of activities and tactics you believe are needed to make progress against each recommendation between now and June of 2026, including:

1. **Key activities and tactics you would like to prioritize as a fully-funded Sector Leader**
2. **Key activities other partners should consider advancing**

Life Science Washington is dedicated to leveraging its Industry members to intentionally build partnerships, collaborations, internships and opportunities with higher education and K-12 programs. Our unique position helps us connect with key partners as well as advocate for explore, prep, and launch programs that will increase awareness of life science careers and build workforce talent to meet the high needs of the industry. LSW is positioned well as a sector leader, with deep engagement and partnerships connecting various stakeholders. Most of the Life Science presence is on the west side in the Seattle and Greater Seattle area, with additional Biomanufacturing industry in Spokane. We host the Life Science Innovation NorthWest (LSINW) annually, which is a northwest focused conference for Life Science companies to interact with each other as well as share their challenges and interests in terms of deepening their presence in Washington state. In addition to LSINW, we also host the East-West Summit that connects Life Science Companies in the Spokane area with interested companies on the west side of Washington state.

To ensure the implementation of our strategies, we require a broader approach to state funding opportunities where Career Exploration, Career Prep and Career Launch are supported each program builder round. Additionally, supporting approaches that provide job-readiness training led by Industry that is scaled with consortia of companies participating in the workforce program. The various workforce programs mentioned in the table above require funding support in the form of curriculum development, statewide and regional infrastructural support to connect industry partners with K-12 school districts and Higher Education partners.

LSW will be carrying Industry-student Career Awareness and Life Science Internship by self-supporting these two strategies. The scale and expansion of targeted higher education programs will require immediate state funding to develop a diverse workforce talent pool.

Strategic Priority 1: Fund targeted higher education institutions to scale and expand new programs in partnership with a consortium of companies with similar talent needs to meet the needs of high demand jobs and roles.

Recommendation 1.1: Provide support for curriculum development/expansion and industry

engagement at targeted institutions to scale existing programs by increasing capacity.

- **Key activities you plan to prioritize as a Sector Leader between now and June of 2026 to advance this recommendation:**
    - Center for Biotechnology Innovation and Training (CBIT) at UW Bothell**:** Identify sustained engagement with Industry partners. Build out the curriculum that covers all FIVE high demand high volume jobs that require a 4-year degree.
    - Co-partner with CBIT to sustain the Seminar Series for the entire year.
    - Introduce professional development workshops for students to develop opportunities to identify key skills that are relevant to the at the minimum the FIVE high demand high volume roles.
    - Identify on-campus internship opportunities and continue to connect small, medium and large companies to build appropriate industry related skills.
    - Support federal funding development to build out sustained financial support.
    - Build a capstone model to engage students and facilitate on-campus internships.

- **Key activities and tactics other partners should consider undertaking between now and June of 2026 to advance this recommendation:**
    - Leverage the Industry based Advisory Board to identify solutions to overcome barriers towards career awareness and on-campus internships.

Recommendation 1.2: Fund initiatives to replicate programs and broaden geographical reach through expansion to additional educational institutions.

- **Key activities you plan to prioritize as a Sector Leader between now and June of 2026 to advance this recommendation:**
    - Jubilant HollisterStier(JHS) has adapted Shoreline Community College's 10-week Biomanufacturing Technician program and are self-supporting the program development to hire 200 employees over the next 2 years. Following the first phase of curriculum development, the focus will be on building student capacity. We will work with JHS hiring managers to identify appropriate learner populations and develop a pipeline to for training. In addition to student capacity, it will be critical to build teaching capacity and have appropriate community college partners i.e. Community College of Spokane
    - Increase awareness of the program within Spokane and build out marketing strategy to increase visibility of JHS' need within the community.

- **Key activities and tactics other partners should consider undertaking between now and June of 2026 to advance this recommendation:**
    - Higher Ed Partners – Spokane Community College is a partner providing teaching capacity to meet the needs of training students at scale. Shoreline Community College has been an able partner in providing curriculum, lab and infrastructural needs that align with the skills that JHS needs from the students going through the program.
    - Regional and Career Connect Learning Coordinators – The east side

Regional Network director and CCL coordinator are partnering with JHS to build student capacity and steadily meet the growing needs.
    - LSW will be working to leverage this opportunity to bring together Biomanufacturing companies on the West side and partner with JHS to build a Biomanufacturing consortia. This will help streamline and standardize the skills needed for the Biomanufacturing consortia and guide future programming to effectively train students and have them be job ready immediately.

Strategic Priority 2: Prioritize and proactively increase career awareness and career support functions (like navigators) to connect life science industry and students.

Recommendation 2.1: For K-12 populations across the state, engage in career awareness to help students understand the diversity and accessibility of career opportunities within the life science industry.

- **Key activities you plan to prioritize as a Sector Leader between now and June of 2026 to advance this recommendation:**
    - As the sector lead for life sciences, we are partnering with Washington Alliance for Better Schools (WABS) with our life science members. Our member partner Allen Institute currently has 10 tours planned with 7 school districts. Allen Institute is supporting travel and food costs for the career tours and curating the tours based on the school's needs.
    - Other life science companies like Bristol Myers Squib and Alta Sciences have shown interest in hosting tours.
    - To accessibility and career awareness the Mobile bus model launched by Seattle Children's research Institute will play a key role in reaching farther places that are hard for companies to reach. This could be extended to include the Healthcare sector.
    - As part of STEM sector, LSW would like to work on devising a Career Awareness strategy statewide that supports consistent connection of schools with their local companies and increase the awareness of companies in the vicinity of schools and school districts. This will require integration of Industry speakers into K-12 curricula to address the "what is the relevance of what I am learning in school?".

- **Key activities and tactics other partners should consider undertaking between now and June of 2026 to advance this recommendation:**
    - Work with WABS to identify Industry – faculty and counselor partnerships to support K-12 staff.

Recommendation 2.2: For 2-year and 4-year degree populations, fund career navigator positions at targeted higher education institutions to enhance career awareness and to help students understand and prepare for the diversity of career opportunities within the life science industry.

- **Key activities you plan to prioritize as a Sector Leader between now and June of 2026 to advance this recommendation:**
    - LSW is leading the career and Industry awareness approach and partnering with numerous higher ed programs to connect and forge

Industry-higher ed partnerships. UW Bothell's CBIT program is coordinating with over 16 life sciences companies and are developing a monthly seminar series. LSW is also partnering with UW Seattle, WSU Pullman, WSU Spokane, WSU Vancouver, Shoreline Community College, Bellevue College. We will be working on developing an Academic calendar that will provide regular industry – higher ed engagement.
    - To increase awareness, LSW is building a webpage that will host various industry engagement opportunities and provide a broader connectivity within the ecosystem.
- **Key activities and tactics other partners should consider undertaking between now and June of 2026 to advance this recommendation:**
    - We will be working with each of the higher ed programs mentioned above to identify seminar series, guest speaker opportunities, career fairs and career panels
    - As a trade organization we are ensuring our members get opportunities to learn about various workforce programs and identify workforce talent pools that support the needs of industry's demands.

<u>Strategic Priority 3:</u> Advance diversity equity and inclusion (DEI) efforts through internships across the industry that provide personnel, resources, and support to expand diversity within in-state workforces.

Recommendation 3.1: Fund non-profit education partners to prepare students for the Life Science Washington Scholars Internship Program to advance DEI within the life sciences industry by supporting, preparing, and matching diverse talent to Washington companies.

- **Key activities you plan to prioritize as a Sector Leader between now and June of 2026 to advance this recommendation:**
    - We will continue to partner with Washington State Opportunity Scholarships (WSOS) to expose their scholars to the opportunities and roles in life sciences.
    - For Summer 2025 Internship we will work with a small cohort of companies and students and will develop the program to increase the impact of the program.
- **Key activities and tactics other partners should consider undertaking between now and June of 2026 to advance this recommendation:**
    - Continue to recruit companies for future iterations of the Internship. While the industry is currently facing various financial challenges, the need for innovation and growth is key for the ecosystem.

<u>Strategic Priority 4</u>: Develop a Technical Residency Program by leveraging state-of-the-art laboratory infrastructure at non-profit research institutes that can provide hands-on experiential learning and development of diverse market-ready life science skills.

Name of Recommendation 4.1: Partner our colleges with our world-class non-profit research institutes to create a multi-year Technical Residency program that combines a degree or credential program with real-world laboratory experiences.

- **Key activities you plan to prioritize as a Sector Leader between now and June of 2026 to advance this recommendation:**

  - Continue to support Fred Hutch's Lab Launch program and work with them to identify a financial model that alleviates the costs for Fred Hutch. LSW identified and is supporting Fred Hutch in various NSF proposals that offer fellowships to students and support staff time.
  - Build a consortia of non-profit research institutes to scale the program and have more students obtain the lab technician certification.
  - Support Fred Hutch in partnering with additional 2-year community colleges to increase their student capacity.
- **Key activities and tactics other partners should consider undertaking between now and June of 2026 to advance this recommendation:**
  - Continue to work with Fred Hutch to identify a sustainable financial model that can be scaled by adding additional partners.

Strategic Priority 5: Maintain Sector Intermediary to coordinate and scale industry involvement in awareness, education, and workforce initiatives.

Recommendation 5.1: Since most life science companies are small to medium sized, research-focused companies, they lack the internal resources or scale to engage productively with education and workforce partners individually. A sector intermediary is needed to help companies participate in curriculum development, internship programs, career awareness activities, and coordinate new initiatives like the technical residency.

- **Key activities you plan to prioritize as a Sector Leader between now and June of 2026 to advance this recommendation:**
  - Continue to support Industry aligned workforce program and build capacity to meet the demands of industry.
  - Leverage partnerships with Industry to increase impact of programs and attract students to career jobs that offer competitive salaries and upward career mobility
  - Increase career awareness of life sciences within various higher ed institutes and connect industry partners with student populations.
  - Lead the Biomanufacturing Coalition in Washington and bridging companies on the west side and east side of Washington. Create a robust workforce pipeline to support the needs of the Biomanufacturing ecosystem.
  - Expand career awareness and increase industry awareness across the state.
  - Continue working with WSOS to build on the Summer Internships to support diversification of life sciences workforce.
- **Key activities and tactics other partners should consider undertaking between now and June of 2026 to advance this recommendation:**
  - Support and advice higher ed partners in various funding opportunities federal and state funding.
  - Continue to hold convenings to understand the needs of industry and develop extensive industry-aligned programs.
  - Strategically work with various communities and stakeholders in Spokane to continue to build the workforce pipeline for Biomanufacturing.
  - Work with CCW to identify funding support for critical programs that directly impact workforce needs of life science companies.