

1. Executive Summary

Personalized medicine is an innovative approach to healthcare that tailors treatment based on a patient's unique genetic code, medical history, and environment. It will reshape the healthcare landscape, deliver better health outcomes, lower costs, and drive new product development in key technology focus area #7. Wisconsin is primed to seize this opportunity.

The Wisconsin Biohealth Tech Hub (WBHTH) is located in the Milwaukee–Waukesha and Madison MSAs, with manufacturing “spokes” around the state. Its six interconnected projects will unite innovation, manufacturing, and workforce development initiatives, building a world-class personalized medicine center through an *Invent-Build-Deploy* virtuous cycle. Over the next decade, these efforts are projected to create 30,000 new direct jobs in personalized medicine and unlock \$9B in regional GDP growth.

Our Tech Hub is anchored by an unprecedented state-wide coalition of bipartisan civic and industry leaders, manufacturers, educators, entrepreneurs, and healthcare giants, all working together to create a healthy, equitable, and prosperous future, supporting Wisconsinites who have been historically underserved. Our region is also home to a uniquely robust cluster of scientific, manufacturing, data science, and health care delivery assets. These provide a firm foundation for our region to lead at a global level and promote our country's national security, reduce our reliance on foreign technology, and develop a secure medical supply chain.

2. Vision, Mission, and Goals

Right Opportunity: The emerging \$180B personalized medicine market is expected to grow at 13% per year to over \$500B in the next decade. Wisconsin has world-class strengths across three major verticals of personalized medicine: 1. *Imaging and Theranostics*: Wisconsin is home to the only major U.S.-based manufacturer of medical imaging equipment (GE HealthCare) and radiation therapy equipment (Accuray); 2. *Genomics*: Exact Sciences and Illumina are world-leaders in cancer diagnostics and genomic sequencing, respectively; 3. *Big Data and Analytics*: Wisconsin is home to the premier healthcare data firm Epic Systems, powerful data research institutes like UW-Madison and Medical College of WI (MCW), and Microsoft's upcoming \$1.4B data center.

Right Place: Too often we see major biotech hubs focus heavily on R&D, then ship their manufacturing offshore, jeopardizing national security and creating the supply chain disruptions we experienced during the COVID pandemic. Wisconsin enjoys one of the richest manufacturing bases in the country. Of the top 20 MSAs for scientific research, Madison is one of only six with competitive advantages in manufacturing. This unique ecosystem marries excellence in biomedical research, commercialized technology, and manufacturing into one geographical cluster, making Wisconsin the right place for a global hub for personalized medicine.

Right Strategy: How will we do it? To succeed in the data-driven personalized medicine field, rapid generation and access to diverse healthcare data is critical to developing new technologies, running clinical trials, and effective commercialization. We will create an infrastructure where continuous flows of data reinforce and strengthen our technology cycle to make the whole greater than the sum of its parts. Our *Invent-Build-Deploy* model reinvents the usual narrow focus on innovation-only efforts to create a virtuous cycle of economic growth. *Invent*: we create assets that tear down the barriers for innovators trying to develop new personalized medicine technologies. *Build*: we leverage our significant manufacturing and workforce assets to build the infrastructure and skill sets necessary for the surging personalized medicine market. *Deploy*: we develop systems that accelerate sales and adoption of new technologies invented and built in Wisconsin. Data is the economic infrastructure of the next century binding the three pillars, and a capable workforce

brings these ideas to life. The WBHTH plans to create these jobs in accordance with the Department of Labor and Commerce “Good Jobs” principles.

Right Now: The EDA’s Tech Hub competition has united Wisconsin’s industry leaders, bipartisan government officials, top academic and clinical institutions, renowned technical colleges, and top labor and workforce organizations to address economic and technology challenges. This grant will fund critical projects lifting us to the next level to become a global tech hub within ten years.

2a. Consortium Members and Partners

Our consortium unites the unparalleled expertise and resources of 18 accomplished partners.

ORGANIZATION NAME	TYPE OF ORGANIZATION	LOCATION
Accuray	Industry	Madison MSA
BioForward	Industry	Madison + Milwaukee MSAs
Employ Milwaukee	Labor & Workforce Dvpt	Milwaukee MSA
Exact Sciences	Industry	Madison MSA
Forward BIOLABS	Science/Tech Econ Dvpt	Madison MSA
GE HealthCare (GEHC)	Industry	Milwaukee MSA
Madison College	Institute of Higher Education	Madison MSA
Madison Region Econ. Partnership (MadREP)	Economic Development	Madison MSA
Medical College of Wisconsin (MCW)	Institute of Higher Education	Milwaukee MSA
Milwaukee 7 (M7)	Economic Development	Milwaukee MSA
Milwaukee Area Technical College (MATC-Milwaukee)	Institute of Higher Education	Milwaukee MSA
Plexus	Industry	Neenah
Rockwell Automation	Industry	Milwaukee MSA
Universities of Wisconsin (UW)-System	Institute of Higher Education	Statewide
University Research Park (URP)	Science/Tech Econ Dvpt	Madison MSA
UW-Madison	Institute of Higher Education	Madison MSA
Wisconsin Economic Development Corporation (WEDC)	Government	Statewide
Wisconsin Regional Training Partnership (WRTP)	Labor & Workforce Dvpt	Milwaukee MSA

2b. Component Project Summary

Our six component projects under the *Invent-Build-Deploy* model address each phase of the innovation lifecycle, from the creation of ideas to their deployment in real-world settings. Aligning Wisconsin’s strengths with data-centric assets enables a virtuous cycle where local innovations achieve global impact, ensuring the state’s biohealth technologies not only lead in personalized medicine, but also contribute to building a more equitable, secure, and sustainable future.

- Innovators often grapple with the accessibility of comprehensive health data. The **Wisconsin Health Data Hub (WDHD)** project (UW-Madison) tackles this challenge head-on, offering a first-of-kind cyber-secure repository of expansive health data, accessible to entrepreneurs, researchers, and industry alike, that fuels innovation by enabling insights from a comprehensive healthcare dataset drawn from diverse populations across the state. This project provides the foundational data essential for the creation of impactful health solutions (*Invent*). Typical development of a new therapeutic medical device takes 3-7 years, costing \$54M. Including the cost of failed studies and cost of capital, the mean cost to bring a product to market is ~\$522M. The WHDH reduces this cost and optimizes the process with real-world data.

- Once innovators have gained these insights, they must assess their ideas for market potential. **The CAREScan Mobile Screening Center at MCW** directly responds to this challenge by deploying mobile cancer screening fleets in underserved communities, reducing health disparities and collecting unique biomarker data from diverse populations. This initiative *deploys* and assesses the market potential of new technologies, while advancing health equity.
- Complexities integrating new technologies into existing healthcare systems often hinder clinical deployment. **The Image-Guided Therapy Data-Centric Patient Care Pathway project** (GEHC) employs AI and sophisticated data techniques to streamline the clinical integration of new technologies and prepare manufacturers and supply chains for upcoming demands. This project drives growth of theranostics—an innovative personalized medicine approach that combines treatments and diagnostics—and supports the growth of new technologies in personalized medicine (*Deploy*).
- **The Advancing Innovation to Commercialization** project (BioForward) bridges the three phases, turning *inventions* into tangible solutions that are *built* and *deployed* on the market. It provides a critical support network for entrepreneurs, offering lab space, investment attraction, and capital efficiency and de-risking strategies, thus moving innovations closer to market and investment readiness.
- **The Actualizing Biohealth Career Pathways (ABC Pathways)** project (MATC-Milwaukee/Madison College) ensures the sector's sustainable growth by creating inclusive talent pipelines that align with employer demands, addressing the workforce challenges inherent in developing, scaling, *building*, and *deploying* new technologies.
- The **Wisconsin Biohealth Tech Hub Governance Project** (BioForward) provides strategic leadership to execute this strategy and lays the groundwork for a robust innovation cluster. By fostering collaboration across the *Invent-Build-Deploy* cycle, this project synergizes initiatives, tracks metrics, and shares learnings, thus reinforcing the cycle of innovation and deployment.

2c. Commitments Summary

The Hub will leverage a total of **\$30.6M** in match and investment commitments from a breadth of partners to become a global biohealth powerhouse. Commitments include:

- **The State of Wisconsin is committing \$7.5M in matching funds** through BioForward, a historic bipartisan success with near-unanimous support in both Wisconsin's Assembly and Senate—underscoring the recognition of the biohealth industry's role in driving economic growth. These unrestricted funds will support three Tech Hub projects through BioForward.
- **Consortium members commit a total of \$7.75M in match commitments and \$22.85M in investment commitments.** This includes cash, in-kind support, such as staff leadership and personnel, economic impact studies, and discounted medical equipment. It also includes an unprecedented reduction and waiving of indirect costs of over \$10M in total.
- **Hiring commitments from industry partners** will expand skills-based hiring, apprenticeships, and internships in biohealth careers.
- **New data-sharing policies** in our projects represent a revolutionary step in collaboration among healthcare systems, research institutions, and private industry. Project leads developed an MOU to formalize this agreement, and plan to expand participation in data-sharing to a broad array of entities via the WI Health Data Hub.

2d. Global Competitiveness Summary

Wisconsin is uniquely positioned to facilitate the *Invent-Build-Deploy* model of technology cluster development. Wisconsin enjoys major innovation assets, which led the Brookings Institute to rank Madison (#1) and Milwaukee (#17) as potential metropolitan areas to emerge as national tech hubs. These assets include a top ten research university (\$2B in research activities as per NSF's 2022 HERD rankings and the Center for Health Disparities Research received one of largest grants in

NIH history); two major medical schools; one of the best technical college systems in the nation; the established WI Alumni Research Foundation (WARF) and their \$3B of assets; and proven entrepreneurial models we can scale and extend (Forward BIOLABS). We have established leaders like molecular diagnostics giant Exact Sciences, emerging radiopharmaceutical leaders like Shine Technologies and Northstar Medical Radioisotopes, and early-stage theranostics startups like Archeus Technologies. We serve diverse populations, from urban to rural, and are strengthening partnerships with Wisconsin's eleven federally recognized tribes. The state is ranked among the top ten across all health care quality measures by the Agency for Healthcare Quality and Research.

Wisconsin builds things. We are home to the only major U.S. manufacturers of medical diagnostic imaging equipment (GEHC) and radiation therapy systems (Accuray). We have identified 443 primary Wisconsin suppliers to the biohealth sector, and boast effective workforce programs, like Employ Milwaukee's employer-led Manufacturing Industry Partnership.

Wisconsin is home to a unique mix of leading healthcare data firms and research institutes, essential for driving innovation in personalized medicine. Wisconsin-based Epic Systems houses most electronic medical records of U.S. patients. Academic institutes such as the MCW's Data Science Lab, Milwaukee School of Engineering NVIDIA-built AI Supercomputer "Rosie," and Northwestern Mutual Data Science Institute in Milwaukee collectively provide a competitive advantage as healthcare-related AI/ML development accelerates worldwide.

2e. Climate and Environmental Considerations

The WBHTH has active measures and plans to mitigate its environmental impacts, including:

- **Energy:** Half of project leads have committed to become carbon neutral by 2030, including GEHC, UW-Madison, and MATC-Milwaukee.
- **Water:** Wisconsin's freshwater supply is a key reason companies choose to operate in the state, containing the largest number of water companies in North America dedicated to sustainable technology. The WI Health Data Hub's servers are hosted by Microsoft, which is committed to replenishing more water than consumed by 2030.
- **Sourcing and waste of materials:** Medical radioisotopes producers Shine and NorthStar have initiatives to recycle and reuse spent nuclear fuel. Further, Exact Sciences' waste-to-energy project recycles nearly all plastic waste in their Madison laboratories. The Hub will partner with Wisconsin companies like Virent and Pyran to expand use of sustainable biofuels to replace petroleum in biohealth products.
- **Environmental justice:** Climate change disproportionately impacts communities of color due to historical disinvestment and other systemic inequities. The WBHTH will use the Climate and Economic Justice Screening Tool to inform its policies and decision-making, especially in the initial selection of priority neighborhoods for CAREScan.

2f. Equity – DEIA Summary

The overarching equity focus of our Hub represents an intentional commitment to deliver inclusive economic growth while advancing health equity in our region. This approach is embedded across all facets of the Tech Hub including, but not limited to:

- **Equitable health outcomes:** Wisconsin has some of the nation's largest black-white gaps in cancer incidence and mortality. The CAREScan project will deliver life-saving care to the neighborhoods of 100,000 residents who experience the highest disparities in healthcare access, leveraging existing community-based partnerships to build respect and trust.
- **Equitable access to good-paying jobs:** Our ABC Pathways project offers wraparound support and enables 2,000 workers to find good jobs that do not require four-year degrees in the growing biohealth sector – targeting underrepresented groups like racial and ethnic minorities, women, people with disabilities, and those from rural communities.

- **Equitable access to capital:** The Advancing Innovation to Commercialization project expands access to biohealth entrepreneurial support infrastructure for underrepresented groups, increasing engagement of female and minority entrepreneurs by 25%.
- **Equitable governance and procedures:** 7 of our 18 consortium members have a primary focus on underserved communities via workforce training and community-led development. As voting members, these organizations shape the Hub’s strategy and decision-making.

2g. Desired Outcomes Summary

With EDA’s investment, we expect Wisconsin’s personalized medicine sector to grow by 30,062 direct jobs (13% CAGR) and 111,200 indirect jobs attributable to the Hub’s efforts over 10 years. The table below illustrates similar significant growth within subsets of personalized medicine, as well as the overarching

PROJECTED 10-YEAR DIRECT JOB GROWTH ACROSS COMPONENTS OF WI BIOHEALTH

SECTOR	NEW DIRECT JOBS OVER 5 YEARS	NEW DIRECT JOBS OVER 10 YEARS	CAGR
Biohealth	41,283	109,605	10.6%
Personalized Medicine (within Biohealth)	10,721	30,062	13.0%
Theranostics/Image-Guided Therapy	4,163	11,673	10.5%
Big Data and Analytics	1,996	5,597	21.0%
Genomics	4,562	12,792	8.4%

biohealth sector. More than half of these jobs will not require a bachelor’s degree, providing equitable economic growth to a wide range of Wisconsinites. Given our strengths in healthcare data and analytics, we consider these projections to be conservative, as the role of big data and analytics and the WBHTH’s corresponding data efforts, are poised to drive significant growth in data analytics at an expected CAGR of 21%. Accordingly, we expect to see Wisconsin’s GDP surge as these project investments drive growth for the region in these key areas, with Wisconsin’s personalized medicine market expected to grow from \$4B to \$13B over 10 years.

2h. Timeline

PROJECT	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Health Data Hub	Build a comprehensive, integrated data commons	Increase usage of healthcare data for discoveries in personalized medicine; Enhance public-private partnerships to spur rapid product development		Foster economic growth through a nonprofit CRO	
CAREScan Mobile Screening	Establish Community Advisory Board; Fill key staff positions	Deliver screening to prioritized areas in MKE and Madison	Expand throughout Hub geography	Expand statewide, including tribal communities	Scale nationally; Launch Screening Center of Excellence
IGT Pathway	Hire staff; Deploy Theranostics Toolkit; Baseline measures	Deploy Theranostics candidate evaluation	Deploy 3rd Party AI model	Deploy clinical nudges	Expand to other disease states; productize model
Advancing Innovation to Commercialization	Expand Madison lab location; Launch ICP program	Open MKE pilot lab, complete Madison Expansion	Plan MKE lab expansion	MKE lab facility expansion completed	
ABC Pathways	Hire staff; Finalize data and phased expansion plans	Expand program placements and exposure and exploration activities		Develop and implement sustainability plan	
Governance	Hire staff; Develop Hub-wide metrics system	Implement comms. and media relations strategy; Share progress to goals; negate threats and disasters; seek additional funding sources			

3. Technical Problem Statement

The Tech Hub's project portfolio addresses six barriers that impede the advancement and commercialization of cutting-edge technologies. No one entity can solve these problems alone, highlighting the need for consortium-wide collaboration.

Problem 1: Costly, fragmented health data restricts economic growth: Patient data is expensive and hard to access, in part because of disparate healthcare providers and medical record systems. This limits innovators from identifying crucial clinical conditions and biomarkers, and the size of the technology opportunities.

Solution: The WI Health Data Hub establishes an unprecedented statewide, HIPAA-compliant data ecosystem paired with access to advanced AI and machine learning-driven data analysis. This lowers barriers to entry for startups, entrepreneurs, researchers, and industry leaders alike, and provides foundational data essential to create impactful health solutions.

Problem 2: Underrepresentation of diverse communities slows innovation and exacerbates health inequities: Racial and ethnic minorities, including tribal populations, have historically been underrepresented in health data and clinical trials, leading to gaps in our understanding of diseases, preventive factors, treatment effectiveness, and outreach insights across diverse populations.

Solution: The Tech Hub directly addresses economic and technical hurdles by facilitating early detection and broadening access to a diverse population. CAREScan's approach leverages a comprehensive clinical platform that complements existing health systems and deep community connections, accelerates new product development through high-quality and diverse data sets, and creates a new business model for national deployment.

Problem 3: Slow clinical adoption restricts new personalized medicine technology: Even with cutting-edge biohealth technologies available, clinicians often face difficulty assessing which patients are candidates for treatments or how they can be integrated into existing care pathways. Without reliable demand, biohealth manufacturers cannot predictably scale their products.

Solution: The Image-Guided Therapy Data-Centric Patient Care Pathway project enables clinicians to better understand and access new personalized medical solutions, speeding their clinical adoption and preparing manufacturers and supply chains for upcoming demands.

Problem 4: Biohealth startups encounter high risks, stifling entrepreneurship: For many early-stage personalized medicine companies, the high-risk of unproven technologies, limited access to lab space, lack of financing, and a shortage of support all pose significant challenges.

Solution: By expanding lab space and resources through the Advancing Innovation to Commercialization project and supplying affordable data through the WI Health Data Hub, the Tech Hub provides targeted support to de-risk technologies and speed their journey to market.

Problem 5: Biohealth training programs are insufficient to meet employer demand: A shortage exists for many critical biohealth jobs. While the region's workforce partners already collaborate on a range of training opportunities, they do not have enough collective capacity to produce the necessary volume of skilled workers.

Solution: Through a coordinated, region-wide coalition, the ABC Pathways project trains and upskills a ready and capable workforce.

Problem 6: A lack of coordination limits the biohealth cluster's strength: The sector's siloed approach to technology development misses opportunities to advance new clinical care pathways.

Solution: With a diverse set of partners across sectors, the Governance project fosters collaboration and maximizes momentum throughout the region.

4. Global Competitive Advantage

As outlined in Section 2d, WBHTH will address national economic and security concerns by onshoring supply chains, offsetting China's aggressive push to control biohealth data and technologies, and countering Russia's influence over the radioisotope supply chain.

1. The WBHTH is driving essential elements of U.S. leadership overall in biotechnology and biomanufacturing. The Tech Hub is taking action to help the U.S. design and manufacture new products, while developing supply chains that are independent from China. This issue was raised by the National Security Strategy, the bipartisan and bicameral Bio-Secure Act introduced last month by Wisconsin Rep. Mike Gallagher (Chairman of the House Select Committee on the Strategic Competition between the U.S. and the Chinese Communist Party), and the Sept. 2022 Executive Order on Advancing Biotechnology and Biomanufacturing Innovation. While much attention has been given to building independent U.S. semiconductor infrastructure, national security officials are realizing that biomanufacturing facilities are strategic assets, just like semiconductor fabs. The WBHTH rises to this challenge posed by industries that are heavily subsidized by the Chinese government.

2. The Tech Hub creates a secure domestic repository of personalized healthcare data with privacy protections. Our WI Health Data Hub project strategically enhances U.S. leadership in biotechnology and health data management amidst pressure from China's expansive genomic data initiatives and strategic investments. China's accumulation of global genetic data and biotech ascendancy compromises U.S. technology leadership and creates threats which include potential bio-surveillance, development of bio-weapons, and losing the economic strategic edge from commercializing such data. By creating a secure, centralized health data ecosystem, the project directly counters vulnerabilities to foreign exploitation, bolsters U.S. competitiveness in biotech and personalized medicine, and supports broader U.S. strategies to safeguard health information, promote innovation, and sustain global leadership in the biohealth industry.

3. The Hub advances U.S. leadership in personalized medicine and theranostics, and promotes domestic production of radiological agents needed in theranostic therapies. Russia's influence in theranostics and radioisotope supply pose significant economic and national security risks. Russia has established itself as a key player in the market for radioisotopes with facilities like the Research Institute of Atomic Reactors (NIIAR) and the joint venture Isotop-NIIAR, aiming to capture a substantial share of the global Molybdenum-99 (Mo-99) market, a critical isotope for nuclear medicine across the globe. Our Hub will address this risk by promoting domestic deployment of the therapies and the corresponding domestic manufacturing of critical radiological agents. This project will draw on Wisconsin-based isotope suppliers, SHINE and Northstar, stimulating domestic isotope production, and mitigating reliance on international supply chains. By improving operational workflows and streamlining the treatment process, the Data-Centric Patient Care Pathway project aims to stimulate the market for the theranostics supply chain, bolstering WI production, and setting a blueprint for broader adoption across the globe.

5. Private Sector Commitments and Activity

As lead applicant, BioForward's long-standing relationships with biohealth businesses and history of responsive engagement with the healthcare industry provides a critical foundation for our private sector engagement. These initiatives include:

- **Private industry and BioForward investment and match commitments total \$18.8M.**
- **Training, hiring, and entrepreneurial commitments:** Wisconsin's largest biohealth employers committed to sponsoring our workforce programs. They are also lending support to emerging entrepreneurs in the Advancing Innovation to Commercialization project.
- **Manufacturing expertise:** Rockwell will share expertise on process automation systems and instrumentation to help align small manufacturers and strengthen our supply chain.

- **Data-sharing agreements and policies:** Our projects contain frameworks to share health data among healthcare systems researchers, and businesses, with HIPAA compliance and patient privacy at their core. Epic Systems and Microsoft are providing advisory services to develop the WI Health Data Hub infrastructure.
- **Complementary place-based investment:** Microsoft recently broke ground on a \$1.4B data center campus in Wisconsin, including \$500K to support local community projects, citing our Tech Hub designation as a major reason for the corporation's investment. GEHC will invest over \$100M in new West Milwaukee and Waukesha campuses to increase its manufacturing capacity, and Accuray will relocate its headquarters from Silicon Valley to the region to take advantage of our highly skilled, lower-cost talent and co-located manufacturing.

6. Capital Ecosystem

In addition to \$7.5M in matching funds from the State of Wisconsin through BioForward, several complementary investments align closely with our Hub's strategy:

- **WEDC** will continue to invest in early-stage companies through demonstrated past commitments: investment tax credits \$140M, \$36M in debt financing, and \$12.6M in SBIR Matching Grant funds. (Wisconsin has a thriving startup ecosystem and is in the top 10 states for NIH SBIR awards per capita.) WEDC has invested more than \$2M supporting the Wisconsin Manufacturing Extension Partnership that serves manufacturing companies.
- Since 2018, **Forward BIOLABS**, a new model of shared, supported, flexible, and fully equipped lab space, has supported 41 emerging growth companies (27% POC-led, 24% female-led, 36% immigrant-led) which have raised \$360M.
- **Grow Milwaukee Recompete Coalition Plan** is a finalist to receive \$20-50M in the EDA's Distressed Area Recompete pilot program, and the project's strategy to catalyze racial equity in economic opportunity will stimulate manufacturing and train a diverse group of workers.

7. Sustainability Plan

The WBHTH prioritizes sustainability as a cross-cutting effort to ensure long-term, inclusive growth that increases the number of good-paying jobs and reduces disparities in health and wealth. Each project developed strategies to ensure the Hub's longevity beyond EDA funding, as provided in the component project applications and summarized below:

- The WI Health Data Hub will establish a self-sustaining, non-profit data innovation CRO and develop a revenue and membership model to support its ongoing work.
- CAREScan aims to scale nationally, leveraging licensing and reimbursement, and commercializing to expand throughout the nation. A Screening Center of Excellence will serve as a national resource for product growth.
- The Data-Centric Patient Care Pathway project plans to productize its toolkit, generate revenue via GEHC's established commercial channels, and scale to other regions and disease states.
- The Advancing Innovation to Commercialization project expects to continue and expand through membership fees, state funding, and industry and community financing.
- The ABC Pathways project will craft a revenue strategy that sustains its sectoral workforce intermediary work with dedicated public, corporate, and philanthropic funding streams.
- The Governance Project will create a development strategy that pursues additional local, state, and federal investments as well as BioForward continuing to leverage its 230+ members. More details on Hub-wide sustainability can be found in the project narrative.

8. Labor Union Engagement and Economic Benefits Plan

Equitable economic benefits remain at the center of the WBHTH strategy. Our goal is ensuring everyone in the region, especially historically underrepresented groups, can share in this prosperity. Our consortium includes two labor-aligned workforce organizations, WRTP Big Step and Employ

Milwaukee, that have been integral in ensuring underrepresented workers can benefit from the Tech Hub’s growth. We will incorporate strong labor standards across projects that correspond with [Good Jobs Principles](#). This includes:

- More than 50% of the Tech Hub’s 109,605 new biohealth jobs over the next ten-years will not require a college degree.
- Wages in the biohealth sector averaged about \$96,000 per worker, and all targeted career pathways offer wages above the median wage for the region.
- Career on-ramps at technical colleges that serve diverse populations and collaborate with community-based partners to recruit underrepresented trainees.
- Projects will include local hire provisions, prioritizing hiring underrepresented vendors.
- Forward BIOLABS is committed to employing union labor for lab improvements.

9. Equitable Benefit Distribution Plan

Equitable access to good-paying jobs: Just 16% of scientists in our two MSAs are people of color, compared to 35% of scientists nationally. Our [ABC Pathways](#) project targets that 30% of program graduates will be people traditionally excluded by the biohealth sector, including skilled workers without bachelor’s degrees, racial and ethnic minorities, women, people with disabilities, and rural workers. Further, we will remove barriers to applicants from underserved communities with a wraparound program that commits to supporting transportation, childcare, and related needs.

Equitable access to capital: While Milwaukee and Madison rank among the top cities in the nation to create a start-up, people of color and women are less likely to benefit due to the lack of access to resources, like loans and investments. Our [Advancing Innovation to Commercialization](#) project will require that 15-30% of companies receiving benefits directly benefit an underserved community or have a founder who is female, veteran, rural, or an ethnic or racial minority.

Equitable governance and procedures: All projects will engage communities that have been historically excluded from development into their projects’ oversight. Further, all projects will track DEIA metrics and outcomes, and our [Governance](#) project will provide accountability, checks and balances, and lessons learned to advance inclusion.

Equitable health outcomes: In 2020, white residents in Milwaukee County outlived Black residents by nearly 13 years – a stark indicator resulting from systemic issues like poverty and education and housing segregation. Our [CAREScan](#) project aims to increase cancer screening rates in underserved communities by 150%, including targeted initiatives to reach Indigenous residents and veterans. This HIPAA-secured data will support the [WI Health Data Hub’s](#) inclusive, comprehensive dataset for future health application development and clinical screening trials.

10. Desired Outcomes Details: SMART Goals, Milestones, Metrics, and Data

These projects will create equitable economic growth across the region.

COMPONENT APPLICATION GOALS	OUTPUTS	OUTCOMES/IMPACTS
1. WI Health Data Hub: Create a robust, accessible, affordable health data resource to improve personalized medicine and support needs of biohealth companies	Secure, HIPAA-compliant data commons; Central repository of datasets; Data visualization portal; Self-sustaining data Contract Research Organization (CRO)	Publicly accessible data ecosystem; 5+ companies and 4+ hospitals using data for R&D; Synthetic datasets created for 4 cancers
2. CAREScan Mobile Screening: Deliver cancer screenings directly to residents experiencing the highest health disparities	Community engagement; AI-enabled tools; Mobile fleet of imaging caravans; Scalable, commercializable national model; Screening Center of Excellence	Register 107,000 community members; Increase cancer screening rates by 150% in all prioritized regions

COMPONENT APPLICATION GOALS	OUTPUTS	OUTCOMES/IMPACTS
3. Clinical Decision Support: Develop a comprehensive, frictionless, and intelligent cancer patient journey and treatment operational support system	Theranostics Toolkit; User nudges; 3rd Party AI application deployment; Commercialization and replication plan	>75% increase in user confidence; Increased patient throughput; Greater clinical trial matching; Higher demand for therapies and scans
4. Advancing Innovation to Commercialization: Accelerate the commercialization of biohealth tech through de-risking activities & increasing capital efficiency	Expand shared lab space infrastructure via Forward BIOLABS; Support early-stage companies with direct de-risking resources	Support 75 biohealth companies that raise \$500M+ in investment capital; Increase minority entrepreneurs reaching financing by 25%
5. ABC Pathways: Connect job-seekers to training for in-demand career path employment opportunities, focusing on historically excluded communities	Biohealth workforce intermediary; Expanded certification programs, on-the-job learning, and skills-based hiring and advancement	Prepare and place 2,000 workers in targeted biohealth jobs within five years, with 30% workers coming from historically underrepresented racial/ethnic groups
6. Governance: provide centralized, coordinated leadership across the Hub	Project management; coordination across players; data collection, analysis, reporting; communications & engagement; risk mitigation	Convene monthly meetings; Develop quarterly dashboards, annual impact report, and annual public event

11. Housing Considerations

As our workforce grows, efforts across the Milwaukee and Madison MSAs will support pro-housing commitments and policies to prevent displacement. Bipartisan affordable housing legislation passed in 2023 will bolster lower-cost housing for Wisconsinites. Exact Sciences is investing in local housing initiatives such as the Dane County Workforce Housing Fund, and WEDC is supporting affordable housing and adaptive reuse projects throughout the state. Complementary efforts from the Grow Milwaukee Recompete Plan aim to increase housing in Milwaukee, supporting minority developers for housing renovation and construction. The Milwaukee-based ACRE program, a training program that expands minority participation in real estate development, recently expanded to Madison and catalyzes new housing projects that help build wealth in underrepresented communities.

12. Changes and Updates Since Phase 1 Application

While the vision of the Hub has remained unchanged from Phase 1, we have made several changes:

- Hired a Regional Innovation Officer, Wendy Harris in November 2023.
- Added to the consortium: MCW, Forward BIOLABS, and University Research Park.
- Established new consortium MOU and project lead Task Force MOU.
- Broadened support from the State government, and built coalitions in our lobbying effort to garner legislative support for matching funds.
- Generated insights on emerging needs in the biohealth industry and job market via the Strategy Development Grant.
- Conducted extensive outreach with employers, entrepreneurs, investors to understand industry needs, including focus groups and in-depth interviews.
- Expanded support through policy and investment commitments, with additional partners including: Microsoft, The Milwaukee Bucks, SHINE Technologies, Northstar Medical Radioisotopes, Mayo Clinic, Bellin Health, and Promega.