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**FON:** EDA-TECHHUBSPHASE2-2023 | FY 2023 Regional Technology & Innovation Hub Program

#### **EXECUTIVE SUMMARY**

The biorevolution is underway, powered by demand for sustainably produced products and singlecelled "micro factories" that will reduce dependence on petroleum and transform the biomanufacturing sector (expected to reach \$200B over the next 15 years). Advances in fermentation technology now make it possible to create zero-emission, high-value products from agricultural commodities, and countries around the globe have made significant investments to scale up biomanufacturing. The iFAB consortium is uniquely positioned to increase domestic production, addressing national priorities such as Executive Order 14081. iFAB unites world-class R&D operations, industry leaders and innovative startups, scalable infrastructure, abundant local feedstock production, unparalleled transportation networks, and strong relationships with local corn and soybean suppliers—all within a tightly focused, 51-mile radius—to move bio-innovation from R&D to full-scale manufacturing. EDA investment in iFAB will spark co-investment of approximately \$680M to support infrastructure upgrades, workforce development, and entrepreneurial activities, invigorating the regional economy and creating ripple effects around the nation and world.

Consortium name: Illinois Fermentation and Agriculture Biomanufacturing (iFAB)

**Geography:** Champaign-Urbana and Decatur MSAs (Champaign, Piatt, & Macon counties in IL) **Core technology area (CTA)**: Precision fermentation and bioprocessing, the intersection of synthetic biology and advanced manufacturing (key technology focus areas #7 and #4). Constraint met by consortium: "Significantly benefits small and rural community," given population of 223,000 and 101,000, respectively, in Champaign-Urbana and Decatur MSAs (Champaign has three CEQ-recognized tracts, Urbana has two CEQ-recognized tracts, and Decatur has thirteen CEQ-recognized tracts<sup>1</sup>).

#### **CONSORTIUM VISION**

Consortium members—31 strong—are united in a vision that links assets, addresses gaps, and connects infrastructure with wraparound programming to transform the region into a globally competitive precision fermentation ecosystem.

**Consortium Members:** Institutes of Higher Education: Parkland College, Richland Community College, University of Illinois Urbana-Champaign; Industry Firms: ADM, Boston Bioprocess, Primient, Synonym Bio, Clarkson Grain Company, Serra Ventures, gener8tor; Industry Groups: Corn Refiners Association, Illinois Soybean Association, Illinois Manufacturers' Association; State Government: State of Illinois; Local Governments: City of Champaign, City of Decatur, Champaign County, Macon County, Piatt County; Economic Development Organizations: Champaign County Economic Development Corporation, Economic Development Corporation of Decatur-Macon County; Intersect Illinois Labor Organizations: Decatur Building & Construction Trades, AFL-CIO, East Central Illinois Building and Construction Trades Council, UA Plumbers & Pipefitters Local 149, United Steel Workers Local 837; Workforce Training Organizations: Workforce Investment Solutions (Decatur WIOA), Champaign County Regional Planning Commission (Champaign WIOA); Organization that Engages Underserved Populations: Illinois AgriFood Alliance (ILAFA); Venture Development Organization: University of Illinois Research Park, LLC; Manufacturing Extension Center: Illinois Manufacturing Excellence Center (IMEC).

<sup>&</sup>lt;sup>1</sup> Climate and Economic Justice Screening Tool

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**Project Descriptions:** The consortium has developed component projects that seamlessly integrate infrastructure with technological innovation, workforce development, and entrepreneurship to advance iFAB goals. (Fig.1) Projects include:

*EnterpriseWorks 2.0: New building for small business incubation.* The University of Illinois Research Park's existing small business incubator, EnterpriseWorks, has nurtured 350+ companies that have raised over \$1.4B in venture funds. Developing the next phase, EW2.0, will add light manufacturing space for start-up companies to commercialize bioprocessing and precision fermentation technologies.

*IBRL 2.0: Expansion of pilot testing space.* The Integrated Bioprocessing Research Lab (IBRL) will increase its footprint to boost fermentation capacity from 2,932L to 17,421L, including state-of-the-art equipment and expanded pilot testing space. IBRL 2.0 will include offices and meeting rooms, increasing to over 100,000 sq. ft. and tripling the capacity to support the annual pilot testing of 60 technologies to assess commercialization potential.

*Primient-Synonym iPROOF: Renovation of idled facility.* After graduating from pilot scale testing, promising technologies require early manufacturing and demonstration scale testing. In partnership with Synonym, Primient's Building 119 (a 12,000ft<sup>2</sup> facility) will be retrofitted to become iPROOF, a modern contract development and manufacturing facility. The redesign supports companies moving from technology readiness levels 3 and 4 to levels 5 and 6 by providing access to four 1,500L and two 13,000L fermenters.

*iFAB-ADM Demonstration Scale Capacity Increase: Facility upgrades.* Upgrades to ADM's BioProducts facility will create modern fermentation capacity at 75,000L, allowing companies to partner, acquire raw materials, and conduct manufacturing to commercialize new technologies.

*Entrepreneurship: Programming and support services.* iFAB component projects aim to both attract global companies to the region and foster home-grown entrepreneurs. Related programming involves securing startup funds, leveraging consulting support, and providing mentorship via the Entrepreneur-in-Residence program and the gener8tor network. Shared equipment, capital access, and contract research organization access are pivotal components of the entrepreneurial ecosystem. These collaborative efforts provide a holistic framework for aspiring entrepreneurs.

*iFAB Works: Workforce development programming.* iFAB Works activities include comprehensive workforce analysis to guide program development and create career opportunities and training programs for underserved young adults. Labor organizations will establish precision-fermentation-specific recruiting and training and industry partners will contribute technical expertise to curriculum development, worker training, and career mapping activities.

Hub Management: Oversight, coordination, and support. Proposed iFAB management is comprehensive, fostering involvement, innovation, and development across the iFAB community. Current iFAB leadership will assume roles in the proposed governance structure by serving as members of the Hub Management team, which will oversee crucial areas such as Strategy & Operations, Infrastructure, Workforce Development, and Entrepreneurship. An Advisory Board that includes consortium members and specialized councils will offer focused oversight in distinct project areas. Hub Management will also shepherd companies through every stage of scaling, maximizing facility investments and speeding commercialization of new technologies.

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iFAB projects will work together to support a globally competitive "lab-to-line" precision fermentation hub in Central Illinois, with support for companies at each stage of scaling

Figure 1Continuum of iFAB projects and their support of biomanufacturing and precision fermentation

IFAB: a future in which the scarcest and/or most polluting materials are produced in a sustainable manner

- **\$200+ billion** in market potential by 2040
- Assets at every stage within a 51-mile radius, including -850k bushels of feedstock produced per day

#### **Commitments and Complementary Initiatives:**

iFAB has secured robust commitments from partners that complement other regional activities. (See the iFAB Commitment Index for a complete list.) Select highlights include:

- **Decatur's Recompete Pilot Program:** Decatur's application to the EDA Recompete Pilot Program was named a finalist. The proposal focuses on workforce engagement and training for manufacturing, emphasizing the electric vehicle and biomanufacturing industries, and complements iFAB's workforce development activities by reaching a broader labor pool.
- *Primient's Plant Investment:* Primient is investing \$500M in their Decatur facility to expand capacity for processing an additional 250,000 bushels of corn daily while increasing energy efficiency. This will increase the fermentation feedstock availability in the iFAB region and improve the sustainability metrics for the iPROOF project.

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• *City of Decatur Infrastructure Upgrades:* Decatur has committed \$118M in infrastructure upgrades including roads, sewage systems, and the watershed. These infrastructure upgrades directly support iFAB consortium members – notably ADM and Primient with their business operations. These upgrades also facilitate company attraction conversations.

**Path to Global Competitiveness:** The precision fermentation market—including specialty chemicals used in cosmetic/household products, food additives and proteins, sustainable aviation fuel, and chemical precursors used in fertilizers and pesticides—is projected to reach ~\$200B by  $2040^2$ . Yet infrastructure bottlenecks must be addressed to realize this market potential. Current estimates project that global precision fermentation capacity must increase by 20x (in Ls)<sup>2</sup> to meet demand, specifically in the food and materials markets. Additionally, Europe currently houses 50% of that capacity, whereas only 34% is housed in the U.S.<sup>3</sup> Without significant public investment, Europe will continue to dominate global fermentation capacity. iFAB will alleviate these challenges by consolidating development and manufacturing in Central Illinois. iFAB's integrated, component construction projects build that capacity and strongly position Central Illinois to capture market potential.

Globally, two distinct types of precision fermentation hubs are emerging: those focused on R&D and strain engineering, clustered near major universities or tech centers, and those focused on manufacturing, typically in rural settings. Current iFAB competitors, such as the Bio Base Europe Pilot Plant in Belgium and ScaleUp Bio in Singapore, are examples of this model. Yet if strain engineering and stepwise manufacturing were combined in one location, precision fermentation unit costs could be reduced by 90%<sup>2</sup>. This is the iFAB approach, uniquely integrating both R&D and manufacturing functions to create a "**lab-to-line**" feedback loop that will unlock economic potential. This integration is a unique strength of the iFAB ecosystem: world-class R&D operations, scalable infrastructure, abundant local feedstock production and strong corn and soybean supplier relationships, all within a 51-mile radius. With EDA investment, iFAB will become the preeminent destination for companies focused on commercialization of precision fermentation and related technologies.

Global opportunities in precision fermentation are not limited to one market or product, as was seen in the fuel ethanol industry. Precision fermentation is an enabling technology, and iFAB is capitalizing on the ubiquity of the required infrastructure and skills to address expanding markets in novel ingredients, textiles, fuels, polymers, agricultural inputs, and more. iFAB's focus on the emerging food and materials spaces, rather than the more mature biopharma market, for example, will fill critical infrastructure gaps for emerging markets with distinct manufacturing needs.

A key to global competitiveness in precision fermentation is a skilled workforce. iFAB is purposely approaching workforce development from the widest perspective possible to meet talent needs—at all levels of employment—as projects scale. Workers who receive training through any of iFAB's programming will be prepared to enter the biomanufacturing and precision fermentation industries, regardless of the target product. Should production capacity continue to increase to meet projected demand, the U.S. would need ~20-30K workers<sup>2</sup> directly working in precision fermentation facilities, and Central IL would require a direct labor force of ~3,000-6,000 total

<sup>&</sup>lt;sup>2</sup> BCG Analysis

<sup>&</sup>lt;sup>3</sup> Good Food Institute

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workers to capture 15-20% of the U.S. market. By the end of the 5-year grant period, this could translate to a regional demand of ~1,000-2,000 direct laborers. There are also indirect employment opportunities for workers in such areas as packaging, cleaning, management, and transportation an estimated 4-5 indirect jobs will be added for every 1 direct role<sup>4</sup>. Additionally, the state's agriculture workforce, (a significant ~11% of the state's total employment), will gain additional stability from biotechnology's feedstock demand. The region will meet this workforce demand by providing foundational skills for certificate seekers, trade union members, and associate, bachelor, and advanced degree holders. This broad approach means that companies who come to Central Illinois for feedstock availability, fermentation capacity, and infrastructure will also find workers to meet their staffing requirements.

**Climate and Environmental Responsibility:** Precision fermentation supplants conventional manufacturing methods, frequently reliant on petroleum, with the transformative power of biological manufacturing. Using agricultural commodities as a raw material improves the sustainability of traditional manufacturing practices.

Precision fermentation and biomanufacturing have the potential to generate even more sustainable practices. New technologies in precision fermentation involve feeding gases like  $CO_2$  to microbial factories. Companies such as LanzaTech, Geno, and Air Protein (all of which have collaborated with IBRL, the iFAB lead) are using concentrated greenhouse gas emissions from traditional manufacturing as a feedstock for their microbes. IBRL has the unique capability of executing pilot-scale  $CO_2$ -fed fermentations, which will attract sustainable precision fermentation companies like these to the region.

ADM is also a global leader in the implementation of carbon capture and sequestration technologies. Decatur sits above the Mt. Simon Sandstone Saline Reservoir, the only geological formation in the U.S. suited for permanent  $CO_2$  sequestration. By combining precision fermentation with carbon capture technologies, biomanufacturing will see enormous improvement in sustainability metrics.

These efforts coincide with growing consumer interest in purchasing sustainable products due to environmental concerns, health and safety benefits, and long-term cost savings (up to 80% of consumers say they think about sustainability in their day-to-day purchasing decisions<sup>5</sup>).

**Equitable Economic Growth:** The precision fermentation industry requires a diverse workforce: scientists, technicians, operators, engineers, construction, skilled trades, and others. Expanding opportunities in the industry will create jobs and improve wages, across the entire educational spectrum. While the median wage for the region is \$44,000, skilled positions in the precision fermentation industry (including those that do not require a college degree) pay a median wage of \$81,000. Workers in both MSAs, including those in underserved and rural communities, can qualify for these high-quality jobs by participating in upskilling opportunities and other formal training programs (e.g., via Parkland College, WIOAs).

Economic growth will also be equitable across both the Champaign-Urbana and Decatur MSAs. Component projects focus on both areas, and the region's top employers, including UIUC, ADM, and Primient, all draw from residents from the region's three counties (Champaign, Piatt, Macon).

<sup>&</sup>lt;sup>4</sup> BCG Analysis and Capacitor

<sup>&</sup>lt;sup>5</sup> <u>BCG Consumer Insights article "Consumers Are the Key to Taking Green Mainstream"</u>

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Specific Outcomes: All iFAB component projects have specific measures of success:

- *Fermentation capacity:* Availability of infrastructure, in liters of fermentation capacity in the ecosystem.
- *Trained workers:* The number of students and workers who attend any iFAB educational opportunity, by demographic breakdown.
- *Job placement:* Job acquisition—noting job level, employer, and salary (when available)—for individuals who complete iFAB-developed training.
- *Company attraction:* Company interactions through all three multi-use facilities (IBRL, Primient's Building 119, ADM's Bioproducts), including valuation when available.
- *Entrepreneurial Ecosystem:* Companies established, licenses procured, support services rendered, and money raised.

**Timeline for Implementation:** Many iFAB consortium members already lead bioprocessing and precision fermentation technology advances. Building on this strong foundation and maximizing current momentum requires additional investment. With EDA support, iFAB will expand curriculum development, education, and entrepreneurial training/support activities, in parallel with facility construction and infrastructure build out. The construction projects, which enable critical fermentation capacity, will be completed on a staggered timeline: 1.) iPROOF March 2026; 2.) BioProducts 2 October 2027; 3.) EW2.0 July 2028; and 4.) IBRL 2.0 February 2029.

## SOLUTION TO TECHNOLOGY ADVANCEMENT

There are currently significant lab-to-market bottlenecks in the precision fermentation industry. Demand far exceeds capacity for pilot- ( $\sim$ 1,000L) and demonstration-scale ( $\sim$ 20,000-75,000L) fermenters, which is exacerbated by the absence of a trained workforce and the prohibitive cost of independent equipment ownership. The iFAB consortium has developed an integrated path to clear these bottlenecks: addressing capacity constraints, supporting new venture creation, and expanding the skilled workforce to meet talent demands.

To tackle capacity constraints, the consortium plans to expand IBRL, increasing annual pilot-scale project capacity from approximately 20 to 60 clients. Additionally, Primient will repurpose an idle demonstration facility, equipped with six fermenters, and ADM will invest in modernizing their 75,000L fermentation facility, and offer co-location opportunities.

The precision fermentation industry is ripe for innovation and the creation of new businesses. Illinois has the entrepreneurial ecosystem founders need to scale and succeed, both in the region and the state. Some of the most notable VC funds investing in precision fermentation and bioprocessing are headquartered in IL (e.g., Serra Ventures—headquartered in Champaign—and ADM Ventures, with a \$2B+ AUM). Company relocation to the region is also increasing. In 2023, there were 22 project explorations within the MSA involving the bio-economy. These ongoing site selection conversations represent a prospective investment of ~\$9.6B and employment creation of 2,753 jobs.<sup>6</sup> iFAB will build on this foundation through the University of Illinois Research Park and gener8tor's Illinois AgTech Accelerator, offering startups access to multi-use facilities and investment opportunities from Serra Ventures' new AgTech venture fund.

iFAB has a multi-pronged strategy to address the workforce gap and increase the talent pool. Three examples include:

<sup>&</sup>lt;sup>6</sup> Intersect Illinois

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- Parkland College and Richland Community College are working with industry members ADM and Primient to map relevant curriculum.
- The Illinois Manufacturing Excellence Center (IMEC) will establish an apprenticeship program through the Department of Labor for biomanufacturing.
- The Illinois Agri-Food Workforce Initiative will develop a K-12 curricula to expose diverse students to industry career opportunities in biomanufacturing.

This close partnership among stakeholders across the ecosystem, from research to scaling and commercialization to end-market, is key to unlocking market potential. Additionally, the state's investment in economic development programs and services will speed adoption of this technology in Illinois (e.g., \$40M in Rebuild Illinois Capital Funds for site readiness grants<sup>7</sup> and the Innovate Illinois coalition focused on the coordinated pursuit of relevant grants<sup>8</sup>).

## HUB NEXUS: TECHNOLOGY ADVANCEMENT AND NATIONAL SECURITY

Biomanufacturing is transforming agricultural commodities into biologically based products that reduce U.S. dependency on petroleum. Precision fermentation, a critical component of biomanufacturing, is transforming sustainable production of nutritional components and protein. Enhancing food security is essential to national security (e.g., 12% of the world's food calories are currently supplied by Russia/Ukraine<sup>9</sup>), but opportunities are not limited to food production. Biomanufacturing and precision fermentation underpin the Biden Administration's 20-year goal to "produce at least 30% of the U.S. chemical demand [~\$500B] via sustainable and cost-effective biomanufacturing pathways." Securing additional funding is crucial to keeping pace with global innovation, since the U.S. lags in infrastructure and public investment.

As the top-ranking U.S. feedstock production location and a major corn processing hub, (~850,000 bushels of corn per day are processed in Decatur), the iFAB coalition is well-positioned to level the playing field. Proximity to feedstocks reduces transportation costs. The region also features robust infrastructure, including a multi-modal transportation system and wastewater facilities.

The University of Illinois Urbana-Champaign solidifies the region's research leadership with renowned programs in Agricultural, Chemical, and Biological Engineering. UIUC's IBRL underscores the university's commitment to advancing technology transfer, from research to commercial applications. Precision fermentation is a key driver for regional and state economic growth, providing alternative markets for U.S. corn production amid declining demand in traditional sectors like ethanol. This aligns with national priorities, enhancing supply chain resilience, decarbonization of end markets, and management of production emissions.

## PRIVATE SECTOR ENGAGEMENT

iFAB members include startups (Boston Bioprocess and Synonym), incumbent bioprocessing multinationals (ADM, Primient), and supply chain players. This range of commitments reflects the consortium's understanding that growing the biomanufacturing industry requires involvement of varying size companies, at all stages in the value chain.

**Startups**: Emergent companies drive innovation and employment, and iFAB is committed to fostering, attracting, and retaining startups through its multi-use facilities, University of Illinois

<sup>&</sup>lt;sup>7</sup> Chicago Sun Times

<sup>&</sup>lt;sup>8</sup> Innovate Illinois

<sup>&</sup>lt;sup>9</sup> International Food Policy Research Institute

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Research Park (UIRP) and EnterpriseWorks Incubator, gener8tor's AgTech accelerator, and capital from Serra Ventures. Since 2018, IBRL has supported 100 companies (including Geltor, Motif FoodWorks, EQUII, Hyfé Foods, AgVault and Tandem Repeat) in their transition to commercialization. Synonym's participation in the iFAB consortium is a testament to the region's resources. Synonym also joined Primient as a Design-Build partner to redevelop its idled facility and is collaborating with IBRL to develop new hire training processes.

**Existing firms**: Primient, partnering with Synonym, will invest \$10.4M to redevelop its idled Building 119 facility into a contract manufacturing facility. Primient is also committing \$500M to modernize their entire core Decatur facility. These modernization projects are crucial to iFAB's efforts, doubling the amount of corn that is processed on site daily and will greatly improve the plant's energy efficiency. ADM, in addition to providing venture capital to fermentation-based startups and strategic partnerships with alternative protein players, is investing \$20M to modernize its BioProducts facility in Decatur. This will enable an outdated facility to support modern precision fermentation projects and technologies.

## **COMMITMENT DESCRIPTION**

The iFAB consortium has secured multiple strong commitments, including more than \$680M in cash match and strategic investments. The Hub has also obtained important policy change commitments: for example, the state's Department of Commerce and Economic Opportunity is naming precision fermentation as a strategic focus area. With the accelerating power of Phase 2 funding, the region is poised for significant and rapid economic growth. A complete list of commitments can be found in the iFAB Commitment Index. Notable highlights include cash match from eight separate consortium members, three industry partners who are providing investment toward their Decatur-based fermentation facilities, policy commitments from both UIUC and the State of Illinois that prioritize bioprocessing and precision fermentation, and workforce development partners dedicated to curriculum innovation to address expanding employer needs. The extensive list of commitments demonstrates that <u>all 31 consortium members</u>, regardless of component project status, are dedicated to Central Illinois' leadership as a Tech Hub in the biomanufacturing industry of the future.

## PLAN FOR LONGEVITY POST AWARD

IBRL's self-supporting business model and economic development mission make it the ideal location for the Office of Regional Innovation (ORI), which will plan for and coordinate ongoing iFAB activities. New full-time iFAB employees will be absorbed into the IBRL staff upon conclusion of the award. IBRL will sustain these employees through projected increases in revenue generation, an increased volume of client projects, and increased workforce development programming. iFAB management also strategically includes organizations invested in both MSAs, such as the economic development corporations in both Champaign and Macon counties. These entities exist independently of iFAB and are focused on business growth in the iFAB region. Both organizations will continue with their mission post award, and the iFAB-specific employees housed within the EDCs will be absorbed by their respective staffs.

Both ADM and Primient have existed as bioprocessing corporations for over 120 years, and both are committing substantial company resources to establish precision fermentation facilities. Primient is providing a facility, welcoming a design-operate partner, and modernizing their entire Decatur corn processing plant. ADM is providing matching funds to execute their project and has

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hired a global President for precision fermentation. Both industry partners are working with iFAB's educational institutions to expand training opportunities and talent pipelines. These commitments exhibit long-term business strategies within both companies for incorporating precision fermentation and extending iFAB's mission beyond the duration of the award.

#### LABOR UNION ENGAGEMENT

The iFAB consortium includes four labor unions and workforce organizations. Union leaders in both Champaign and Decatur will serve on the iFAB advisory board and will establish recruitment and training efforts through the workforce development component project. iFAB members IBRL, Primient, and ADM employ members of all four partnering unions. The consortium is committed to implementing project labor agreements and community benefit agreements, ensuring wages meet or exceed prevailing rates and incorporating local hiring provisions. This strategic approach highlights iFAB's dedication to maximizing economic benefits for residents while promoting growth in the precision fermentation sector.

#### PLAN FOR EQUITABLY SHARED BENEFITS

iFAB component projects are spread between two MSAs and projects are structured to ensure that EDA investment is shared equitably between geographies, public/private partners, and others.

As noted above, equitable benefits from job creation will lead to high-wage jobs for workers with a range of backgrounds, education, and skills. New workers will be trained to meet increasing demands in the trades, scientific fields, plant operations, technical processes, engineering, and administrative support. iFAB component projects reflect the diverse workforce training requirements needed to expand the industry. Partner labor unions, community colleges, regional planning commissions, and the ILAFA will all leverage EDA investment toward educational opportunities for underserved demographics and increasing the diversity of iFAB's workforce. The UIUC-led projects will also continue to engage the University's diverse student body for its educational offerings and entrepreneurial training.

To ensure diverse perspectives and equitable allocations persist through iFAB's structure and leadership, iFAB management has established an Advisory Board, as well as strategic councils on: Strategy and Operations, DEI, Infrastructure, Workforce Development, Entrepreneurship, and Access to Capital. The Advisory Board is populated with consortium members—each member receives a single voting seat ensuring that all consortium members have an equal voice. Councils will be open to both consortium members as well as strategic partners. These councils provide a platform for broader participation and inclusion of diverse perspectives. Councils will meet quarterly to identify areas of growth and improvement for the Hub.

#### **OUTCOMES**

With the catalyst of EDA investment, Central Illinois will become the global leader in precision fermentation and bioprocessing over the next ten years. Conservative estimates of economic impact for the region are \$10-20B, which will continue to grow as more biomanufacturing is attracted to the region. iFAB's leadership will attract companies and talent, which will catalyze the long-term success of the component projects. Infrastructure, workforce development, and an entrepreneurial ecosystem are essential components of creating a global economy solution for expanding the biomanufacturing industry in the U.S. The ecosystem required to facilitate this will be established through iFAB's projects.

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Metrics related to trained workers, job creation, fermentation capacity, and industry engagement will be monitored and reported by iFAB, and specific outcomes of each component project are described in their narratives.

As the region continues to mature, more companies will rely on this ecosystem for technology development and will likely establish a presence in the region, thus generating a self-sustaining ecosystem and creating ongoing economic prosperity.

## PLAN FOR HOUSING DEMAND GROWTH

iFAB Consortium members, the City of Decatur and the EDC of Decatur-Macon County are addressing the housing continuum needs in Macon County. Both organizations have commissioned housing market analyses to address affordable housing (in 2021 by the City of Decatur) and workforce, multi-family residential (in 2023 by the EDC of Decatur-Macon County). Both analyses aligned with the City's neighborhood revitalization plans and path-to-home ownership programs. It was determined that the market could support over 600 new rental units. Jointly, the City and EDC have identified developable parcels, created new Enterprise Zone incentives, and are meeting weekly with developers to build capacity.

The Champaign County EDC, the City of Champaign, and Champaign County, in partnership with the Champaign County Regional Planning Commission are pursuing a county-wide Pathways to Removing Obstacles to Housing (PRO Housing) Grant. This grant would fund a regional housing study and develop a set of policy recommendations to provide more affordable housing and enhance multijurisdictional collaboration. Champaign County is actively exploring steps to remove barriers to affordable housing caused by outdated zoning, land use policies or regulations; inefficient procedures, gaps in available resources for development; deteriorating or inadequate infrastructure; lack of neighborhood amenities; or challenges to preserving existing housing stock. CCEDC is committed to analyzing the county's housing market and exploring development needs to ensure the housing supply will meet the needs of the growing workforce.

# **ACTIVITIES BETWEEN SUBMISSIONS**

- Decatur's EDA Recompete Pilot Program submission was named a finalist.
- Champaign was named a finalist for company site selection associated with several hundred million dollars in investment.
- Primient brought Synonym Bio on as a strategic partner to ensure success of Building 119 revitalization project. This relationship will result in a joint venture for 119 operations.
- Serra Ventures launched a new AgTech Fund (which has already exceeded its original investor funding goal), making capital more accessible to iFAB startup companies.
- ADM demonstrated a company-wide commitment to precision fermentation by hiring a global President of Precision Fermentation.
- Illinois Department of Commerce and Economic Opportunity (DCEO) identified biomanufacturing and precision fermentation as a strategic focus in its updated 5-year plan.
- IBRL added capacity to run CO<sub>2</sub> fed fermentation expanding the types of companies it can support and increasing sustainable fermentation options.