Our Vision
The Gulf Coast Health Sciences Corridor is primed to be the next robust U.S. health sciences industry corridor. This super region, which includes New Orleans, Baton Rouge, as well as the rural and suburban communities between them, represents over 65% of Louisiana’s population and over 68% of all jobs in Louisiana. In the years following Hurricane Katrina, leaders from the super region recognized that to drive change in Louisiana and compete with larger metros like Houston and Atlanta, collaboration – rather than competition – was needed. These efforts have changed how Louisiana approaches our structural economic and health challenges.

Louisiana has long believed that a vibrant health sciences industry cluster is critical to economic diversification and addressing longstanding disparities in health and wealth. For more than two decades, health care, higher education, business, and economic development institutions have worked with philanthropic, government and nonprofit leaders to harness expertise, physical assets, and investments to create a global center of excellence in critical health care specialties such as neurodegenerative disorders, infectious diseases, and chronic disease. This included the formation of the BioDistrict in 2005 to lead this sector’s development in New Orleans, and the Baton Rouge Health District (BRHD) in 2016 to nurture its growth in the capital city.

We have a unique window of opportunity to complete the transformation of our economy through a robust super region health sciences cluster that creates equitable and sustainable growth, provides good-paying jobs for people across all education and training levels, and advances healthcare solutions for a large patient population with chronic illnesses.

Our vision is to transform the super region into a national leader in health sciences with a focus on addressing obesity and chronic disease by: (1) Creating economic opportunity through specialized workforce development from middle-skill jobs through highly specialized researchers with a focus on women, residents in rural areas, and people of color who have been traditionally excluded from generational wealth creation opportunities; and (2) Strengthening the region’s research development and commercialization pipeline through infrastructure and collaboration to leverage industry expertise and promote start-up creation and investment.

Economic Opportunity
The super region from Baton Rouge to New Orleans drives Louisiana’s economy. Home to 62% of the state’s largest employers and 17 higher education institutions, this super region is responsible for 55%1 of Louisiana’s GDP. However, this economy remains vulnerable due to its continued reliance on two primary sectors which have only been weakened further by the COVID pandemic: oil & gas, and hospitality & tourism. These sectors, too often, contribute to significant economic and health disparities, leaving Louisiana with the second highest poverty rate and the second highest percentage of workers at or below the federal minimum wage2 of any state in the nation. Because of its overreliance on tourism and hospitality, the New Orleans metropolitan statistical area (MSA) experienced the worst economic impact in the state as a result of the

1 https://brac.org/sola-super-region/
2 https://www.investlouisiana.org/invest-in-workers
pandemic, losing over 37,300 jobs (-6.4%).\(^3\) Louisiana’s oil and gas industry also suffered a severe decline, losing over 7,500 jobs over the course of the pandemic. This industry now employs 27,000 Louisianans, down from 51,000 at its peak in 2014\(^4\). In the same time period, the region’s Health Sciences cluster set a record as the fastest growing in the nation – having experienced a 12% increase in employment\(^5\).

A continuing legacy of institutional racism contributes to severe disparities in economic status and health outcomes among people of color in Louisiana\(^6\) that reinforce each other. This costs Louisiana billions of dollars and robs families of economic stability, social mobility, and years off the length of their lives. As a result of significant economic disparities and some of the highest rates of chronic illness in the nation, COVID has disproportionately impacted people of color in South Louisiana. Unemployment data at the peak of the pandemic showed that 58% of the people who were unemployed in Louisiana were Black, despite Black residents making up only 32% of the state’s population. Black residents have died from COVID at nearly twice the rate of white residents\(^7\).

A strategic investment in South Louisiana’s health sciences industry cluster provides the most promising opportunity to create a more resilient and equitable regional economy and reduce the state’s health disparities\(^8\). The region’s health sciences cluster is already the fastest growing in the U.S. with more than $2 billion in recent public and private investments. The two 2019 Comprehensive Economic Development Strategies for the super region prioritize diversifying and advancing equity in the regional economy through collaboration and further investments in health sciences infrastructure, entrepreneurship, and workforce development.

**Our Coalition**

Our coalition is led by the New Orleans Bionnovation Center (NOBIC) in partnership with the New Orleans BioDistrict (BioDistrict) and BRHD. Additional coalition members who are well aligned to support cluster-based economic development include the Greater New Orleans Foundation (GNOF), Greater New Orleans, Inc. (GNO, Inc.), LSU Health New Orleans, Pennington Biomedical Research Center, Tulane University, Xavier University of Louisiana, and Delgado Community College (DCC). Additional coalition partners include Baton Rouge Area Chamber (BRAC), Baton Rouge Area Foundation (BRAF), Ochsner Health, LCMC, and more.

The coalition identified eight coordinated projects that enable new businesses growth, create a robust job training pipeline, and retain the small businesses and talent we need to transform our economic and health outcomes through the health sciences. These projects address a critical lack of facilities, supercharge an equitable workforce pipeline, and achieve greater health and economic equity while growing our start-up ecosystem.

**Project 1 - Employer-Driven Middle-Skill Workforce Training:** Since the health science industry employs one-third of its workforce in middle-skill jobs that require training beyond high

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\(^4\) LSU LEO 2020 – Daily Advertiser
\(^5\) RPC CEDS 2019
\(^6\) Bureau of Minority Health Access – Strategic Plan 2017-2020
\(^7\) http://parlouisiana.org/racial-data-2/
\(^8\) United Health Foundation – 2020 America’s Health Rankings
school but less than a bachelor’s degree, health science employer partners will leverage GNOS’s
New Orleans Works (NOW) Collaborative and work closely with DCC, the Louisiana Community
and Technical College System, high schools, and other training providers to address workforce
development and talent pipeline gaps through capacity building, novel partnerships, innovative
programming with an equity focus, and reinvigorated industry leadership. An estimated $8M in
EDA funds will support costs for planning, pilot programs, private sector-led development
strategies, and paid internships to provide work experiences and employment connections for
women, people of color, and lower income residents in diverse health settings, including
university, hospital, and start-up laboratories.

Project 2 - Expanding HBCU-Research One Joint Degree Programs: Xavier and Tulane
Universities will build on their successful 3 + 2 engineering master’s degree programs in chemical
and biomedical engineering to expand the availability of diverse talent in the region. An estimated
$5M in EDA funds will help remove the two primary barriers to student participation and the
growth of these programs: tuition and transportation. It will also help enhance the joint LSU/Xavier
PharmD/PhD in pharmacology as well as their new undergraduate neuroscience research
mentoring programs to foster translational research and increase the number of people of color
trained in advanced biomedical research.

Project 3 - Commercialization Innovation Fellowship Program: The Xavier Entrepreneurship
Institute and the Tulane University Innovation Institute will partner to launch the first two classes
of a two-year postdoctoral research fellowship focused on developing and retaining high-level
research and commercialization talent among women, LGBTQI+, and researchers of color. The
fellowship will provide well-compensated formal training, an immersive work experience, and
support to enter full-time employment or entrepreneurship with project partners. EDA funding of
$3M will support approximately 20 fellows with salary and benefits over two years.

Project 4 - Shared Biotechnology Research and Commercialization Facility: An estimated
$25M in EDA funding will support construction to support the region’s economic competitiveness
- a shared facility for advanced biotechnology development for research universities, businesses,
and startups. It will include (1) wet-lab space for early-stage ventures and translational research
with dedicated space for women and people of color-owned startups; (2) a shared hurricane proof
cell line "vault" that protects research materials in the event of prolonged power outages or other
disturbances; and (3) a Data Visualization Lab linked to Tulane’s existing Cypress high-speed
computing system with a large interactive display wall for collaborative visualization and analysis
of complex data. This facility will be built on NOBIC’s existing campus, which is located within
Louisiana Opportunity Zone Tract #134. Please see sustainability section re: matching funds.

Project 5 - Health Equity Accelerator Program Hub: Inside the shared commercialization
facility, NOBIC will host a health equity accelerator hub that identifies, supports, and scales
sustainable health ventures to support innovation. This centralized accelerator hub unites,
strengthens, and fills gaps among the region’s complementary accelerators, pitch competitions and
commercialization programs while focusing on creating a more inclusive entrepreneurial
ecosystem. Consistent with Section 27 of the Stevenson-Wydler Technology Innovation Act, a
$3M EDA investment will strengthen our health sciences competitiveness through new product
innovation, full-time job creation in bio-based ventures, and foreign direct investments/exports.
Project 6 - Center for Innovation in Implementation Science: BRHD will build a new Center for Innovation in Implementation Science on the Pennington Biomedical Research Center campus in Baton Rouge. This Center will put scientific solutions in the hands of healthcare practitioners to more rapidly commercialize and implement new research on how to effectively prevent, treat, and cure obesity, diabetes, cancer, and dementia. An up to $25M EDA investment will leverage existing private and internal investment available for the center.

Project 7 - Regional Economic Acceleration through Coordinated Health Infrastructure (REACH): Coalition member BRHD seeks $5M in EDA funding for transforming interstate entry points into the district and upgrading the streetscape to match and support the quality of existing healthcare facilities. Over $9M in matching funds have been identified.

Project 8 - “Neuro-Nola”: Neuro Nola will make southeast Louisiana a national destination for the research and treatment of neurodegenerative diseases. With the world population of people over 65 years old expected to double by 2050, the need to prevent and treat neurological diseases as a key subset of chronic diseases will continue to grow exponentially. $1M in EDA funding will help GNO, Inc. lead the development and early implementation of a strategic plan to coordinate and scale the region’s expertise and assets in this area to drive substantive change.

Proposed Metrics of Success
The table below displays anticipated project metrics and outcomes over the grant period based on the coalition’s track record, capacity, and dedicated resources to the project. These align with our CEDS and will be further refined for Phase 2. Participating partners will be required to provide relevant economic outcomes, impact metrics, and workforce development outcomes. The coalition will use project management tools (Monday.com), a survey platform (Paperform), and existing forms ED-915-918. The Regional Economic Competitiveness Officer will solicit, maintain, and track these figures. Outcomes and metrics will be reported to the EDA biannually and made available to the public.

<table>
<thead>
<tr>
<th>Proposed Workforce Metrics/Outcomes</th>
<th>Proposed Economic Metrics/Outcomes</th>
<th>Proposed Impact Metrics/Outcomes</th>
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<tbody>
<tr>
<td>450 new middle-skill workers employed with industry partners 25 full-time specialized innovation fellowships awarded, at least 15 to people of color 15% Increase of Retained GMEs Increased # of GMEs of color Increased # of physicians50 new Bio-Apprenticeships, at least 30 for people of color</td>
<td>$300M in new revenue 500 coalition TA meetings $250M in non-dilutive funding awarded to clients # of new facilities in bio or health districts in service % increase in New Orleans BioDistrict tax base (TIF)</td>
<td>2,500 jobs created or retained $250M in new investment capital, ($180M to women and POC) 15 industry-led clinical trials Regional Relative Wage Growth GDP Growth 55 SBIR/STTR Phase I and II Innovation Awards Received</td>
</tr>
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Accessibility of Matching Funds for Phase 2 & Complementary Investments
The coalition members and partners have access to several different sources for matching funds in order to continue our work beyond the EDA grant period. The coalition will leverage unencumbered resources, both public and private, and commence the proposed project promptly, use funds quickly and effectively, and provide a clear scope of work for all Phase 2 projects. We expect to leverage more than $30M in support from coalition members and partners, local and state government, and the Louisiana Board of Regents. Leaders of the BioDistrict have secured support from the New Orleans Mayor and Louisiana Economic Development to use its taxing authority to
create a Tax Increment Financing (TIF) District, which could generate approximately $86M over 20 years in matching funds for state and federal grants and sustain much of this work within the BioDistrict. Additional support is committed from philanthropic partners GNOF and BRAF, who helped create the BioDistrict and BRHD, respectively.

**Barriers to Implementation & Mitigation Strategies**

The coalition has identified four primary barriers to implementation and developed mitigation strategies to address them. Currently, our ecosystem lacks enough private risk capital for health science startups. Our coalition will continue to work to grow angel and venture capital groups in the region with a focus on facilitating connections between startups and investors through the Innovation Hub. Southeast Louisiana has a legacy of structural racism that limits our economic growth and workforce participation from significant segments of our community by race, gender, income and geography. This coalition includes several partners focused specifically on advancing racial equity and will include rigorous attention to racial equity throughout all activities (from construction procurement to fellowship and startup program design). In addition to hiring a Regional Competitiveness Officer, the coalition will seek to announce a Chief Equity Officer to help center this commitment across partners. Participation in our limited workforce and startup pipeline, particularly among under-represented communities, and ensuring all people have knowledge of these opportunities and the ability to access training for them remains a challenge. This coalition has coordinated industry engagement with ongoing support from all of the largest healthcare systems and hospitals in the region. We will direct resources for workforce outreach to trusted community partners as well as the region’s community colleges, high schools, minority-led chambers of commerce, and workforce development boards. Similarly, we have trusted partners in Xavier University, NOLABA, and equity-focused community-based accelerators to ensure a strong pipeline of diverse startups. Finally, biosciences ventures require highly specialized facilities that need significant planning and capital resources. Our coalition will use Phase I funding to create a comprehensive sustainability strategy to ensure our facilities’ long-term success and maximize impact.

**Timeline for Implementation**

Our coalition has the personnel and infrastructure in place to quickly begin implementing this project upon award notification. Below is the proposed timeline for execution of Phase 1: