January 13, 2017

TO: Each Supervisor
FROM: Sean Rogan, Executive Director

SUBJECT: REPORT ON COUNTYWIDE BIOSCIENCE CLUSTER DEVELOPMENT INITIATIVE

Introduction

On February 8, 2011, the Board of Supervisors (Board) directed the Chief Executive Officer (CEO), the Director of the Department of Health Services (DHS), and other appropriate departments to identify opportunities for the County to develop a program of partnerships in the bioscience industries that would promote outstanding public health care delivery, job creation, and research. The Countywide Bioscience Initiative began with this direction to CEO and DHS to explore academic and research partnerships that would provide tangible benefits to the County anchored on five County-owned hospital campuses:

1. Los Angeles County + USC Medical Center (LAC+USC)
2. Rancho Los Amigos National Rehabilitation Center (Rancho Los Amigos)
3. Harbor–UCLA Medical Center (Harbor–UCLA)
4. Olive View–UCLA Medical Center (Olive View)
5. Martin Luther King Jr. Medical Center

On July 10, 2012, the Board authorized the CEO to execute a contract with Battelle Memorial Institute (Battelle), a biotechnology consultant, to perform a feasibility assessment and develop a master plan framework for the Bioscience Initiative. Completed on August 5, 2014, the final Battelle Report found that the local bioscience cluster of related industries (therapeutics and diagnostics, biomedical engineering, healthcare delivery innovations, and related distribution and supportive activities) has been, and continues to be, an important economic driver for the region. Bioscience distinguished itself by being the only cluster of industries that continued to grow during the Great Recession. However, the globally competitive potential of the bioscience cluster in Los Angeles County is hindered by a number of structural deficiencies causing much of the local intellectual property, entrepreneurs and workforce assets to migrate to other regions at home and abroad.

Nonetheless, the Battelle study concluded that a coordinated program involving public and private stakeholders could address these regional deficiencies and could have the potential to anchor and expand this local regional cluster to excel on a global scale. The Battelle study said that such a program must focus on cultivating entrepreneurial talent, increasing access to lab space, attracting early stage capital to help start-ups, and a coordinated campaign to raise awareness and market the local cluster.
Following the receipt of the Battelle study in late 2014, under the Board’s direction, the CEO, the Department of Health Services (now under the Los Angeles County Health Agency), the Community Development Commission (CDC), and Community and Senior Services (now known as Workforce Development Aging and Community Services (WDACS)) have moved forward with several key actions to launch and strengthen partnerships to support the region’s bioscience cluster, including the following:

- Supportive partnerships with Cal State University Los Angeles, an anchor institution along the corridor of under-utilized industrial space east of the Los Angeles County + USC Medical Center, including $3 million in capital funding (later matched by an additional $3 million U.S. Dept. of Commerce grant) for a new bioscience incubator on the campus. The ground breaking occurred in November 2016 for this new Rongxiang Xu Bioscience Innovation Center and its 20,000 square feet LA BioSpace incubator. County local agency support also helped Cal State LA secure a $499,087 grant from the Economic Development Administration of the U.S. Department of Commerce to establish LABioStart, a “boot camp” for bioscience entrepreneurs across the region.

- $3 million in capital funding for the new LA BioMed 78,000 square feet research facility that will house a 20,000 square feet incubator; and designation of 15 acres on the County’s Harbor-UCLA Medical Campus for development of a bioscience tech park. The Board of Supervisors certified the Final Environmental Impact Report for the Harbor-UCLA Medical Center Campus Master Plan that includes the bioscience tech park on December 20, 2016.

- Formation of the non-profit MLK Health and Wellness Community Development Corporation that could take the lead on managing and leasing a renovated MLK hospital facility with 100,000 square feet earmarked for bioscience related users.

- Workforce Development Aging and Community Services (WDACS) participation in the LA Valley College BioScience Partnership Agreement, a regional collaboration to address Bioscience/Biotechnology workforce solutions, like establishing a career pathway system including position profiles, advancement opportunities, skills and credential requirements, projected wages, and industry breakthroughs.

- Initial seed funding for a Bioscience Revolving Loan Fund was established as part of the 2016-17 Final County Budget.

- Internal real estate analysis was initiated at County hospital campuses to identify opportunities to provide the physical space needed to support bioscience partnerships.

Community Development Commission assembled a working group of academic, public and private sector stakeholders and then partnered with a consultant, the Los Angeles
County Economic Development Corporation (LAEDC), to provide a menu of actions and potential partnership opportunities for the County and private stakeholders to consider going forward in order to overcome the barriers identified in the 2014 Battelle Report. This Implementation Plan framework describes the roles of regional private firm-to-firm networks, local geographic anchors, and funding programs need to support industry partnerships. The framework also describes the larger context within which to understand previous and existing County activities as well as point to potential additional strategic actions. http://www.lacdc.org/Implementation Plan

Community Development Commission commissioned a community outreach program report from Estolano, LeSar, Perez Advisors (ELP Advisors) to identify the community partnerships and types of community benefits that could be realized when bioscience-related development occurs. http://www.lacdc.org/Community Outreach

In addition to the efforts undertaken directly by the County, private sector bioscience leaders have advanced partnerships to overcome the barriers identified in the Battelle study that are well-aligned with the actions taken by the County, including:

- Lab Launch, a bioscience incubator that opened their first facility in 2015 in Monrovia, announced recently a new partnership with Make in LA to create a new bioscience-focused laboratory at the Make in LA campus in Chatsworth. Lab Launch has also formed a strategic partnership with California Life Sciences Association, which opened their first office in Los Angeles County in Monrovia as a result of this new partnership.

- The LA Bioscience Hub secured a $100,000 LA 2050 Challenge Grant from the Goldhirsh Foundation to create the Biotech Leaders Academy, which provides an entrepreneurship academy and paid internships at local biotech firms and incubators for community college students from populations that are under-represented in the bioscience industry.

- BioAccel recently secured $250,000 in funding from the Economic Development Administration of the U.S. Department of Commerce to form an early-stage venture capital fund targeting biomedical technology companies;

- Biocom opened an office in downtown Los Angeles in 2016, providing representation from the three leading bioscience and life science trade associations within Los Angeles County: Southern California Biomedical Council (SoCalBio), California Life Sciences Association (CLSA), and Biocom: Life Science Association of California (Biocom).

All these events of recent years continue to evidence the potential for increasing public and private partnerships to grow the Los Angeles County bioscience cluster. The actions of the County Board of Supervisors have buttressed this growth while maintaining a focus on partnerships that promote outstanding public health care delivery, job creation, and
research. The private industry actions illustrate that aligned non-governmental organizations and industry associations are essential to bring together the stakeholders needed to connect regional firms, attract investors, grow and retain local talent, engage public sector agencies, and tell the regional story. At the same time, creating a network of concentrated physical places or hubs connected to anchor health institutions, that include incubators, office and educational space, and business tech parks, is also critical to support close-knit communities of innovators and give entrepreneurs, workers, investors, and policy makers a vision for where the local industry is and what it can be.

Next Steps

The County has demonstrated its commitment to supporting the bioscience cluster and should consider the following next steps to strategically shape its program of partnerships for the regional cluster growth going forward. The Commission recommends the following actions:

1. County to engage communities surrounding opportunity anchor locations to develop or support community partnerships to achieve community participation, identify benefits, and mitigate any potential negative impacts of bioscience facilities development.

2. CEO to convene a taskforce between the Los Angeles County Health Agency and select industry experts to identify how the County’s delivery of outstanding health and mental health services benefits from bioscience partnerships. Specific bioscience research goals of the Health Agency should be prioritized with respect to any County funding for bioscience partnerships. This taskforce should also address the role of the Health Agency and its procurement impact on or support for local firms.

3. County to identify and prioritize further development of the private partnerships needed to develop bioscience programs and physical assets, especially at hospital campuses, that will catalyze significant industry activity at these anchor hub locations.
   a. On October 4, 2016, the Board instructed County Counsel to report back to the Board regarding structuring such partnership agreements to yield a return to the County’s investment and identify such existing agreements with the County. County Counsel will be responding separately.
   b. Initial efforts on developing partnerships that support bioscience industry activities should focus around Harbor-UCLA Medical Center and the LAC+USC Medical Center, with additional consideration given to MLK Medical Center, Rancho Los Amigos, Olive View-UCLA, and as well as the Honor Ranch property.
c. These efforts should include robust and ongoing engagement with the community in designing partnerships to address community health, job training, employment and local business development needs.

4. The County’s Workforce Development Aging and Community Services (WDACS) to work with the region’s Workforce Development Boards and both local and regional workforce partners to establish a talent development and retention program that focuses on careers and career pathways specific to the bioscience industry, and which emphasizes the entry-level positions that can be accessed by a broad pool of County applicants.

a. WDACS to support paid internships for the LA Bioscience Hub Biotech Leaders Academy through the LA County Youth Jobs (LACYJ) program for eligible college students pursuing degrees in biology, microbiology, chemistry and biochemistry and who wish to participate in an entrepreneurship training programs which expose and empower students to pursue entrepreneurial opportunities within biotechnology.

b. Emphasis will be placed on building on County’s existing workforce development programs (like LACYJ and WIOA entrepreneur-support funds), Workforce Development Board priorities, and leveraging local and regional educational resources such as community colleges and universities to secure agreements to meet the skill priorities of bioscience firms in the Los Angeles region. These agreements should specifically focus on delivering outcomes in the communities connected to anchor hub locations.

c. These programs should also include a system for matching bioscience entrepreneurs with executive and management-level talent to help scale and advance early-stage companies.

5. CEO and CDC to review the existing Bioscience Revolving Loan Fund and identify an appropriate investment vehicle that supports the creation and sustainability of early-stage companies. Actions may include:

a. Secure the services of a consultant to validate the necessity for County participation and to provide recommendations on the optimal fund structure that maximizes benefits for long term job creation and return on the County participation.

b. Solicit through a Request for Proposals (RFP) for a fund manager to design and deploy an investment vehicle which ensures the most promising early-stage companies have access to downstream capital at each stage of their commercial development.

6. CEO to evaluate legislative initiatives, such as the Capital Investment Incentive Program (CIIP), that could be expanded to support local bioscience developments.
The CEO will work in partnership with local municipalities to implement existing and expanded business incentive programs at local anchor hubs.

7. CEO and CDC to convene a roundtable of the trade associations, leading educational institutions in bioscience research, representatives from established bioscience support groups, the Health Agency, and WDACS, in order to seek consensus on what non-governmental organization (NGO) is needed to lead and implement ecosystem-wide actions recommended to overcome the barriers in the Battelle study.

   a. This non-governmental organization should be representative of the industry and should have a viable business plan that is not dependent on funding from the County.
   b. County and other local governments would work with this NGO to effectively market the local industry cluster in a coordinated manner.
   c. This NGO would work with local stakeholders to draw attention to the strengths of existing and emerging anchor locations for the industry, particularly where the County can show a strong partnership in these efforts.

The above series of next steps should be considered in roughly sequential order as the initial recommendations will help to frame tangible efforts around County-owned properties, talent development, and business incentives. When coupled with strong and focused private sector leadership, the results of these County efforts should help to foster a regional industry cluster ecosystem that retains talent, supplies adequate local facilities, delivers capital to support start-ups' commercialization of research, and shares a common message for bioscience cluster partnerships needed to secure the region's global economic competitiveness.