



# County of Los Angeles CHIEF EXECUTIVE OFFICE

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Chief Executive Officer

June 29, 2011

To: Mayor Michael D. Antonovich  
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Supervisor Zev Yaroslavsky  
Supervisor Don Knabe

From: William T Fujioka  
Chief Executive Officer

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Fifth District

## REPORT ON FEASIBILITY ASSESSMENT FOR A BIOTECHNOLOGY PARTNERSHIP PROGRAM

On February 8, 2011, your Board instructed the Chief Executive Officer (CEO), Director of Health Services (DHS), and other appropriate County departments to conduct a feasibility assessment for developing or supporting a countywide public and private biotechnology partnership program that would promote outstanding public health care delivery, job creation, and research and report back to the Board in writing within 60 days on the progress. The feasibility assessment should identify: a) opportunities for potential private academic and research partnerships at each of the County-owned hospital campuses: LAC+USC Medical Center (LAC+USC), Rancho Los Amigos National Rehabilitation Center (Rancho), Harbor-UCLA Medical Center (Harbor-UCLA), Olive View-UCLA Medical Center (OVMC), and Martin Luther King, Jr. Medical Center (MLK); b) potential existing and upcoming local biotechnology initiatives on which public and private collaboration would be aligned with County Strategic Plan goals; c) potential sources of both public and private resources that could support this effort; d) key potential private and public academic and research partners; e) potential approaches that the County could take to ensure the County realizes tangible benefits from a public and private biotechnology partnership program, including potential performance benchmarks; f) potential challenges; and g) develop a potential implementation schedule.

*"To Enrich Lives Through Effective And Caring Service"*

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This is to provide your Board with our report on this matter. A detailed report is attached and includes: background; findings as to partnership opportunities, existing and upcoming initiatives, private and public resources, tangible benefits-benchmarking, and challenges; as well as recommendations. In addition, a summary and recommendations are noted below.

## **SUMMARY**

Biotechnology is the application of scientific and technical advances in life sciences to develop commercial products. The bioscience industry is composed of four sectors and three of these sectors impact our County health departments: drugs and pharmaceuticals; medical devices and equipment; and research, testing, and medical labs.

Many experts believe that the economic growth industry of the 21<sup>st</sup> century is biotechnology. Biotech jobs are a highly-diverse and growing industry which continues to demonstrate employment growth in spite of our halting economy. More and more jurisdictions, including other countries, are willing to expend extraordinary amounts of funding and provide incentives in order to attract, retain, and expand biotechnology in their area.

In the field of biotechnology, the Los Angeles region has lagged behind other areas of the State, such as San Francisco and San Diego. Although it will take a highly committed and concerted effort, the greater Los Angeles region can emerge as a formidable challenger in the arena. Our findings indicate that a composite of a highly successful, integrated biotechnology cluster includes:

- University Research/Medical Centers – establish and/or expand partnerships with the California Institute of Technology (Caltech) a world leading scientific institution; UCLA and USC, some of the country's best medical schools; LA BioMed, one of the country's leading nonprofit biomedical research institutes; as well as other highly regarded institutions that make the Los Angeles area their home.
- Biotech Investment/Diversity – champion program to bring large and established biotech and pharma companies; early stage and developing companies; and critical service providers, such as contract research organizations. Program should include market diversity by including pharmaceuticals, biologics, medical devices, and diagnostics.

- Research and Development (R&D) – support and expand R&D capacity to encourage commercialization of new discoveries. Establish partnership opportunities with universities in the LA area as well as other local institutions, such as LA Biomed.
- Venture Capital – address early-stage capital for biotech companies by developing program which promotes venture capital investing, angel investors, and other sources.
- Regulatory Environment – create a positive business environment that supports biotech industry including: taxes, regulatory barriers, operating costs, and cost of living.
- Industry Promotion – establish partnerships with the private sector to foster and promote a biotechnology “community” for the LA area.

At the center of this effort is the County of Los Angeles which can serve as the catalyst to energize and bring this highly sought industry to the area. The County can lead the way by developing a master plan that will establish a biotech cluster at the former Medical Center, Rancho, Harbor-UCLA, OVMC, and MLK. Such a master plan will incorporate the recently Board approved full-service incubator for biotechnology start-up companies that is currently underway with Momentum at the former Medical Center, as well as other existing biotech efforts.

## **RECOMMENDATION**

This Office and DHS conducted a feasibility assessment as to the establishment of a countywide public and private biotechnology partnership program that would promote outstanding public health care delivery, job creation, and research; and determined that such a program was feasible. This Phase I assessment has been completed and it is recommended that Phase II be launched. Given the complexity and requisite expertise that will be required for the continuation of this project, we strongly recommend that the County initiate Phase II via the services of a consultant.

A consultant, with the appropriate subject matter expertise, can best assist the County navigate the highly complex field of biotechnology. In addition, a consultant can provide dedicated resources to ensure this project is expedited and completed within a designated timeframe. A recommended schedule and timeline for Phase II of this effort includes:

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- CEO and DHS to coordinate with your Board offices and develop a statement of work – within 30 days (July);
- CEO and DHS to engage consultant services and secure an agreement – 45 days (mid-September);
- Consultant to conduct Phase II of the biotechnology program and develop master plan – 60 days (mid-September – mid-November); and
- CEO and DHS to return to your Board with Phase II findings and provide recommendations – 45 days (December).

If you have any questions, please contact me or your staff may contact Sheila Shima, Deputy Chief Executive Officer, at (213) 974-1160.

WTF:SAS  
MLM:RL:gl

Attachment

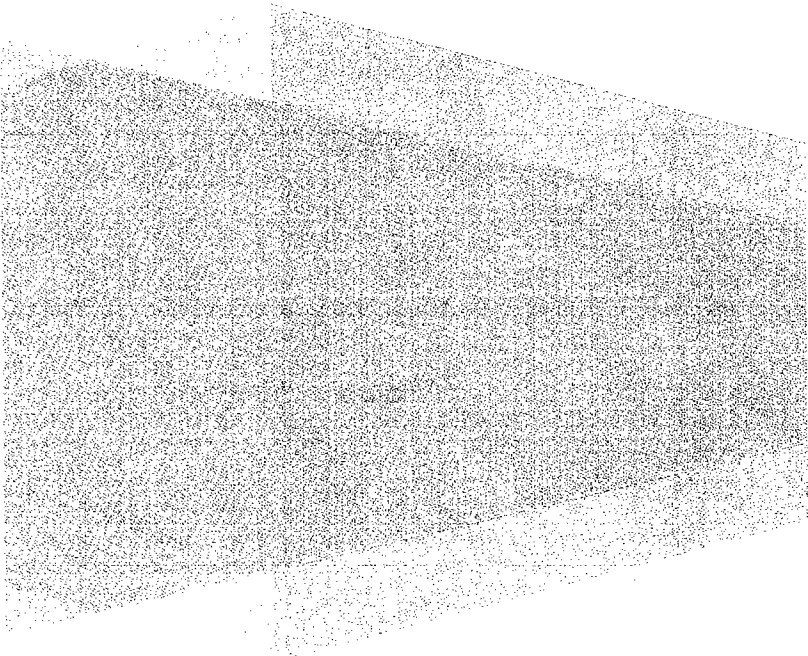
c: Executive Office, Board of Supervisors  
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**REPORT ON THE  
FEASIBILITY ASSESSMENT  
FOR A  
BIOTECHNOLOGY PARTNERSHIP PROGRAM**



**COUNTY OF LOS ANGELES**



**CHIEF EXECUTIVE OFFICE  
JUNE 2011**

**REPORT ON THE  
FEASIBILITY ASSESSMENT FOR A  
BIOTECHNOLOGY PARTNERSHIP PROGRAM  
COUNTY OF LOS ANGELES**

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## 1. OVERVIEW

On February, 8 2011, the Los Angeles County Board of Supervisors (Board) instructed the Chief Executive Officer (CEO), Director of Health Services (DHS), and other appropriate County departments to conduct a feasibility assessment for developing or supporting a countywide public and private biotechnology partnership program that would promote outstanding public health care delivery, job creation and research; and report back to the Board in writing within 60 days on the progress.

The feasibility assessment should identify:

- a) opportunities for potential private academic and research partnerships at each of the County-owned hospital campuses: LAC+USC Medical Center (LAC+USC), Rancho Los Amigos National Rehabilitation Center (Rancho), Harbor-UCLA Medical Center (Harbor-UCLA), Olive View-UCLA Medical Center (OVMC) and Martin Luther King, Jr. Medical Center (MLK);
- b) potential existing and upcoming local biotechnology initiatives on which public and private collaboration would be aligned with County Strategic Plan goals;
- c) potential sources of both public and private resources that could support this effort;
- d) key potential private and public academic and research partners;
- e) potential approaches that the County could take to ensure the County realizes tangible benefits from a public and private biotechnology partnership program, including potential performance benchmarks;
- f) potential challenges; and
- g) develop a potential implementation schedule.

## 2. BACKGROUND

Biotechnology has been described as the application of scientific and technical advances in life sciences to develop commercial products. The bioscience industry is composed of four sectors and three of these sectors impact our County health departments: drugs and pharmaceuticals; medical devices and equipment; and research, testing, and medical labs. Many experts believe that the economic growth industry of the 21<sup>st</sup> century is biotechnology.

Part of our review included research of material available in the biotechnology field. We also contacted subject matter experts, met with some of your Board offices, and visited the Los Angeles Biomedical Research Institute (LA BioMed) at Harbor-UCLA. In addition, we conducted an inventory and the following represents the biotech efforts that are currently underway at our County facilities.

## **2.1. LAC + USC**

Founded in 1947, Health Research Association (HRA), is an affiliate of the University of Southern California (USC) and provides clinical trial support services to LAC+USC. HRA provides support to the medical staff in the conduct of biomedical research, providing important access to new drugs, and biological and medical devices. As such, LAC+USC has contributed substantially to medical advancements in many areas. Each year, over 250 new studies are initiated including studies in oncology, gynecology, ophthalmology, neurology, cardiovascular medicine; the activities span all medical disciplines. HRA provides an important avenue for interaction with the biotechnology industry.

A major step in the biotech field was your Board's approval in April 2010 of negotiations with Momentum LA Inc. (Momentum) to establish a full-service incubator for biotechnology start-up companies at LAC+USC. As indicated in our February 25, 2011 report to your Board, the business plan with Momentum has been completed. The remaining documents, including the lease, purchase warrant agreement and incubator program agreement are underway and we anticipate bringing them to your Board shortly.

## **2.2. RANCHO**

The Los Amigos Research and Education Institute, Inc. (LAREI) was established in 1956 as a non-profit organization to work with Rancho. The mission of LAREI is to conduct medical research and education activities at Rancho to continuously improve the care and quality of life of persons with disabilities. In addition, Rancho in collaboration with USC, has a federally funded Rehabilitation Engineering Center on Technologies for Successful Aging with Disability. They are investigating the use of virtual reality and gaming for rehabilitation and exercise after stroke, and influencing wheelchair and automobile designs to improve independence.

## **2.3. HARBOR-UCLA**

Harbor-UCLA has a research partnership with the Los Angeles Biomedical Research Institute (LA BioMed) since 1952. The relationship with this independent research institute on the campus has spawned numerous diagnostic tests, new pharmaceuticals, vaccines, health care delivery systems, as well as other discoveries. This includes collaboration on biotechnology projects on an ongoing basis.

## **2.4. OVMC**

OVMC works with the Olive View-UCLA Education and Research Institute (ERI) and presently conducts about \$5 million in biomedical research projects on campus. There are 98 active biomedical research projects currently underway, the majority of which are drug trials. In addition, OVMC partners with California State University-Northridge (CSUN) on more biotech projects.



## **2.5. MLK**

There are no biotech relationships underway at this time at the MLK site.

## **3. FINDINGS**

Our review indicates that a biotechnology partnership program is feasible and that growth opportunities exist not only for the County of Los Angeles, but the Los Angeles region.

While the Los Angeles region has notable biotechnology efforts, it has not distinguished itself in the biotechnology field as well as other California areas. However, the greater Los Angeles region has strong universities and teaching hospitals that are very active in the life sciences and experts indicate that these are key components to a successful biotechnology effort. Although the County of Los Angeles is involved in some promising efforts, it must be recognized that a strong and highly committed effort will be required in order to elevate the ranking of the Los Angeles region in the biotech field. A true concerted effort will require involvement by government (local, State and federal), the private sector, and academia.

### **3.1. PARTNERSHIP OPPORTUNITIES**

Given the County's public hospital and healthcare system, extensive land portfolio, and existing relationships with UCLA and USC, some of the country's best medical schools, the County is uniquely positioned to develop an outstanding biotechnology program. To reach this goal, we must ensure that we leverage our vast land resources and that we develop suitable and appropriate biotech models for our campuses, which complement and support the overall system of care while bringing jobs to the area.

Leading institutions located within the greater Los Angeles (LA) area and the County's real estate portfolio form key resources that can potentially poise the County to emerge as a leading area in the biotechnology field.

The LA area is home to many leading, and often considered "first," institutions of higher learning. The California Institute of Technology (Caltech) is a leading scientific institution, not only in the county, but the world. UCLA and USC are some of the country's best medical schools. LA BioMed is one of the country's leading nonprofit biomedical research institutes and their achievements span five decades. The institute conducts biomedical research, trains young scientists and provides community services, including childhood immunization and nutrition assistance.

As noted, LA BioMed was founded in 1952, and has 150 researchers and more than 1,000 ongoing studies, including: a major effort on the next generation of antibiotics; refining methods for earlier identification of Type II diabetes; development of enhanced breast cancer detection; and preventing blindness in children in developing nations.

The County has four hospitals and two Multi-Service Ambulatory Care Centers (MACCs), representing over 5 million square feet of space. The LAC+USC site, specifically, the “former Medical Center” has available space and negotiations with Momentum to establish a full-service incubator for biotechnology start-up companies is currently underway. In addition, there is available space at the Rancho, Harbor-UCLA, OVMC, and MLK sites.

The following biotech models expand and/or foster the biotechnology field and are typical of the industry. Partnerships can be explored based upon these models. As previously noted, some of these models are present at County sites.

### **3.1.1. RESEARCH LABORATORIES**

The bulk of scientific research is performed by universities and the private sector; the main focus is basic, experimental discovery. Research is generally supported by governmental agencies such as the National Institutes of Health (NIH) and Department of Defense (DoD) as well as corporate research and development departments.

### **3.1.2. RESEARCH AND DEVELOPMENT (R&D)**

R&D is usually undertaken by the private sector or universities; the main focus is to develop basic science discoveries. R&D is highly supported by the corporate sector as well as governmental agencies, such as NIH and DoD.

### **3.1.3. BUSINESS INCUBATORS**

These organizations or programs are specifically designed to accelerate the successful development of start-up companies through a full array of business support resources and services. Incubators typically seek out promising academic research and help them grow into successful, viable companies.

The commercialization process takes the discovery (e.g., drugs, diagnostics and medical devices) and delivers it to the market place. A framework for commercialization would provide for scientific, regulatory, and management strategies. The drug commercialization process includes, but is not limited to: a) clinical studies (there are four major clinical phases for drugs); b) FDA approval; c) patents; and d) marketing.

An organization or institution can sponsor one or more of the above three models. Intense efforts to engage deeply in the biotechnology space often manifest through generation of Biotechnology Parks or Biotechnology Clusters.

### **3.1.4. BIOTECHNOLOGY PARKS**

These projects house numerous organizations ranging from academic and government entities to large and small private companies, and may include business incubators. Often based on or near academic institutions, technology parks help foster a community that allows businesses and organizations to focus on innovation and advanced research.

### **3.1.5. BIOTECHNOLOGY CLUSTERS**

These are geographical areas with large and established biotech and pharmaceutical companies, early stage and developing companies, and research organizations. Successful biotech clusters include top level research universities and academic medical centers. The presence of these institutions is highly important as they bring crucial grant funding and talented research individuals required for research and invention, leading to commercialization of products. Academic medical centers also often conduct and lead clinical trials for product approvals.

## **3.2. REGIONAL ENGAGEMENT AND SUPPORT**

Biotech efforts do not need to be limited to the County of Los Angeles. The greater LA area is also uniquely positioned for the biotech field. Though successful initiatives have not taken root within the LA area, local and regional players, such as the Southern California Biomedical Council (SoCalBio or SCBC) and IMPACT initiative (discussed below), should be recognized for their highly committed efforts to expand the biotech industry in Southern California.

Although the LA region lags behind other California areas, the following actions are could help to build biotechnology's presence. Additional analysis as to the development and/or support of these efforts should be explored.

### **3.2.1. TARGETED BIOTECHNOLOGY INVESTMENTS**

As a key driver of economic growth, identify program/s that the County and other public entities can champion to encourage the development and growth of the biotechnology sector in the greater LA area.

### **3.2.2. OVERALL INDUSTRY PROMOTION**

Develop a program, including partnerships with the private sector that establish, foster, and promote a biotechnology "community" for the LA area.

As one example, SoCalBio promotes and supports biomedical and biotechnology research, development, and manufacturing in the greater Los Angeles region with resulting benefits in terms of economic

development and job creation. SoCalBio is a non-profit, membership-based California trade association and is open to members located in Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Santa Barbara counties. The membership is composed of biomed/biotech firms, service providers, public sector agencies, research hospitals, and colleges and universities.

### **3.2.3. SUPPORT FOR RESEARCH AND DEVELOPMENT (R&D) CAPACITY**

Develop program that supports and expands R&D capacity, and which encourages commercialization of new discoveries. Identify partnership opportunities with universities in the LA area to help promote them, as well as other local institutions, to ensure that they are well positioned to compete and obtain R&D grants and awards.

In our discussions with LA Biomed, they indicated their strong support for a continued and expanded partnership with the County.

### **3.2.4. VENTURE CAPITAL**

Develop program to address early-stage capital for biotech companies in the LA area. Although California tends to be a State in which bioscience venture investing is generally concentrated, the LA area is not considered a leader within the State.

### **3.2.5. LEGISLATION**

Develop program that promotes tax policy and other regulatory infrastructure that support the biotechnology industry.

## **3.3. PRIVATE AND PUBLIC RESOURCES**

In addition to the County's real estate portfolio and its existing relationships with major academic institutions such as USC and UCLA, it is essential that LA County utilize additional resources, both private and public, to support the growth of biotechnology in the LA area. Connecting small, promising companies with the necessary start-up funding will allow these companies the ability to mature into successful, viable ventures.

Private funding may be available through several sources, such as venture capital organizations, "Angel" investor groups (i.e., small groups of individual, affluent investors), and philanthropic foundations. Southern California is home to many venture capital organizations, some of which are already involved in the biotech field. However, there remains significant potential for biotech growth in the LA area, which could potentially drive the need for greater involvement from venture capitalists.

Federal funding is available through the U.S. Small Business Administration (SBA) Office of Technology's Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs, which seek to foster the growth of the nation's small, high-tech, innovative businesses. To date, over \$16 billion has been awarded to various small businesses by the SBIR and STTR programs.

IMPACT Initiative – Kristina “Z” Holly, Vice Provost for Innovation, Executive Director, USC Stevens Institute for Innovation, has proposed a pilot initiative for the federal government to invest a small amount of funding (\$2 million per year, per university, for five years) at 10 local demonstration sites to identify best practices for coaxing breakthrough ideas out of universities, and to develop objective metrics for measuring results. The initiative “IMPACT: Innovation Model Program for Accelerating the Commercialization of Technologies” notes that university research forms the foundation for some of the most significant U.S. technological advancements. However, many ideas are left on the shelves in the laboratories awaiting discovery.

### **3.4. TANGIBLE BENEFITS**

Successfully fostering the growth of the biotech industry in the greater LA area will lead to many benefits to the County and its residents, such as increasing the number of well paying, high-tech jobs, driving innovation and academic pursuit, and increasing patient access to new and innovative treatments. Biotech jobs are a highly diverse and growing industry which continues to demonstrate employment growth in spite of our halting economy.

The County may choose to implement any of the noted biotech models; however, to build upon already existing efforts, biotech incubators and/or biotech parks would seem the next logical step. Such incubators/parks could be established at the noted County sites.

California is widely recognized as the leading state in the U.S. for biotechnology, and within the state, San Francisco and San Diego are considered the top two regions. In the August 2009 study “The Marketplace for Ideas: Can Los Angeles Build a Successful Biotechnology Cluster? A Report to the John Randolph Haynes Foundation,” by Steven Casper, Keck Graduate Institute of Applied Life Sciences, the study noted that in 2000, it was reported that Stanford and UC San Francisco accumulated over twice as many patents developed by UCLA. Collectively, the Los Angeles area universities have commercialized less research than their peers in other parts of California.

The study further notes that a comparison of university spin-offs in the San Diego and Los Angeles area indicates that during the 1980 to 2005 period at least 51 biotech companies located in San Diego can trace their origins to local university science, while only 10 Los Angeles region biotech companies could be linked.

The following are some of the benchmarks that the County could utilize to ensure tangible benefits from public-private biotechnology partnerships are realized.

#### **3.4.1. PATENTS**

The development of patents is a strong indicator as to the successful commercialization of biotech research.

#### **3.4.2. SPIN-OUT COMPANIES**

Successful biotech companies often lead to new companies, usually when a company's employees leave to start a new venture or when a division separates from a parent company.

#### **3.4.3. INCENTIVES**

As part of any future public-private partnerships, the County could substantially benefit in various ways, such as increased patient access to innovative medical treatments or receiving financial interests in any successful biotech ventures.

#### **3.4.4. JOBS**

Expanding the biotech industry in the greater LA region would bring new, high-paying, skilled jobs to the local economy.

### **3.5. BENCHMARKS OF PROGRESS**

A variety of successful biotechnology cluster models could be utilized as benchmarks by which to measure LA County's success in enhancing its presence in the biotech field:

#### **3.5.1.**

The University of San Diego (UCSD) Science Research Park – 30-acre parcel designed to enhance the university's instructional and research base through programs that provide an opportunity for interaction between outstanding industrial and academic research activities; continue to attract and retain top researchers and scientists; enhance the private support for UCSD research, graduate fellowships, undergraduate and graduate student training, and collaborative faculty and private sector industrial research projects; and create a financial resource.

**3.5.2.**

Colorado Science + Technology Park at Fitzsimmons (Fitzsimmons Park). Colorado has become home to a highly advanced, fast-growing life science cluster and reports 16,000 workers in more than 400 companies in the bioscience industry. The Fitzsimmons Life Science District (District) area includes 300 square miles within four cities. Project leadership's goal was to transform a former industrial area into a highly connected, sustainable commercial, residential, and lifestyle center for the future.

Within the District, the Fitzsimmons Park, a 170-acre parcel was modeled after successful medical research parks across the country. There are more than six million square feet of corporate and bioresearch facility space. The site is specifically designed for the life science industry and offers, among other things, build-to-suit lab space, turnkey wet-lab facilities, and bioscience incubator.

**3.5.3.**

San Francisco Mission Bay (MB) Biotech Cluster ("Bay Cluster") – San Francisco (SF) is considered the birthplace of biotech and is home to many of the world's premiere biomedical researchers and scientists. The Bay Cluster is anchored by the 43-acre MB campus of the University of California, SF; QB3, a cooperative effort among three campuses of the UC and private industry; the California Institute for Regenerative Medicine (CIRM), the newly formed \$3 billion State agency dedicated to funding stem cell research; a state-of-the-art hospital that will serve women, children and cancer patients; the Gladstone Institute; and numerous cutting-edge biotech companies.

**3.6. CHALLENGES**

Los Angeles County lacks a vibrant biotech cluster and network and attempting to expand its market share will be extremely challenging given more established biotech sectors. Additionally, biotech jobs are highly coveted and many jurisdictions have expended extraordinary amounts of funding and provided incentives but have not been able to create a concentration of biotech firms.

Indeed, in January 2010, it was reported that a state expended \$1.5 billion and provided numerous incentives to eight biotech organizations but it had yet to see the growth of technology clusters in the participating counties. A review of the heavily subsidized effort indicated that the noted state had limited early stage capital for beginning companies. It was suggested that the state shift its focus from attracting research firms to providing early stage money for startup biotech companies.

#### **4. SUMMARY**

Many experts believe that the economic growth industry of the 21<sup>st</sup> century is biotechnology. Biotech jobs are a highly diverse and growing industry which continues to demonstrate employment growth in spite of our halting economy. More and more jurisdictions, including other countries, are willing to expend extraordinary amounts of funding and provide incentives in order to attract, retain, and expand biotechnology in their area.

In the field of biotechnology, the Los Angeles region has lagged behind other areas of the State such as San Francisco and San Diego. Although it will take a highly committed and concerted effort, the greater Los Angeles region can emerge as a formidable challenger in the arena. Our findings indicate that a composite of a highly successful, integrated biotechnology cluster includes:

##### **4.1. UNIVERSITY RESEARCH/MEDICAL CENTERS**

Establish and/or expand partnerships with the California Institute of Technology (Caltech) a world leading scientific institution; UCLA and USC, some of the country's best medical schools; LA BioMed one of the country's leading nonprofit biomedical research institutes; as well as other highly regarded institutions that make the Los Angeles area their home.

##### **4.2. BIOTECH INVESTMENT/DIVERSITY**

Champion a program to bring large and established biotech and pharma companies, early stage and developing companies, and critical service providers such as contract research organizations. Program should encourage market diversity by including pharmaceuticals, biologics, medical devices, and diagnostics.

##### **4.3. RESEARCH AND DEVELOPMENT (R&D)**

Support and expand R&D capacity to encourage commercialization of new discoveries. Establish partnership opportunities with universities in the LA area as well as other local institutions, such as LA Biomed.

##### **4.4. VENTURE CAPITAL**

Address early-stage capital for biotech companies by developing program which promotes venture capital investing, angel investors, and other sources.

##### **4.5. REGULATORY ENVIRONMENT**

Create a positive business environment that supports the biotech industry, including taxes, regulatory barriers, operating costs and cost of living.



#### 4.6. INDUSTRY PROMOTION

Establish partnerships with the private sector that foster and promote a biotechnology “community” for the LA area.

At the center of this effort is the County of Los Angeles which can serve as the catalyst to energize and bring this highly sought industry to the area. The County can lead the way by developing a master plan that will establish a biotech cluster at the former Medical Center, Rancho, Harbor-UCLA, OVMC, and MLK. Such a master plan will incorporate the recently Board-approved full-service incubator for biotechnology start-up companies that is currently underway with Momentum at the former Medical Center, as well as other existing biotech efforts.

#### 5. RECOMMENDATIONS

The CEO and DHS conducted a feasibility assessment as to the establishment of a countywide public and private biotechnology partnership program that would promote outstanding public health care delivery, job creation and research; and determined that such a program was feasible. This phase I assessment has been completed and it is recommended that phase II be launched. Given the complexity and requisite expertise that will be required for the continuation of this project, we strongly recommend that the County initiate phase II via the services of a consultant.

A consultant, with the appropriate subject matter expertise, can best assist the County navigate the highly complex field of biotechnology. In addition, a consultant can provide dedicated resources to ensure this project is expedited and completed within a designated timeframe. A recommended schedule and timeline for phase II of this effort includes:

- CEO and DHS to coordinate with the Board offices and develop a statement of work – within 30 days (July);
- CEO and DHS to engage consultant services and secure an agreement – 45 days (mid-September);
- Consultant to conduct phase II of the biotechnology program and develop master plan – 60 days (mid-September – mid-November); and
- CEO and DHS to return to the Board with phase II findings and provide recommendations – 45 days (December).

Biotech efforts do not need to be limited to the County of Los Angeles. As with the County, the greater LA area is uniquely positioned for the biotech field. While successful initiatives have not taken root within the LA area, the Southern California Biomedical Council (SoCalBio or SCBC) and IMPACT initiative should be recognized for their highly committed efforts to expand the biotech industry in Southern California.