



NEWS UPDATE

News & Information from California's Biotechnology Leaders

Biotechnology Medical Breakthroughs

Significant number of medical breakthroughs developed in 2011 2011 saw over 3,000 medicines in development and dozens of new treatments approved. In fact, the fiscal year marked one of the highest numbers of drug approvals in the past decade, surpassed only by 2009. Many of the new innovations include:

- Two new treatments for hepatitis C
- A drug for late-stage lung cancer
- The first drug for lupus in 50 years
- Plus, patients who suffer from rare diseases may have found hope in one of 10 new medicines, such as a treatment for thyroid cancer. [Read More.](#)

New Treatments Approved by FDA:

- **Plexxikon's Melanoma treatment Zelboraf**, a medicine to treat patients with late-stage melanoma, the most dangerous form of skin cancer. [Read more.](#)
- **Pfizer's treatment for advanced kidney INLYTA**. INLYTA was discovered, researched and developed primarily in California. [Read more.](#)
- **Vertex Pharmaceuticals' Innovative Cystic Fibrosis treatment**. [Read more.](#)
- **Amylin's once-weekly diabetes injection Bydureon**, which provides glycemic control for diabetes type 2 in a once-weekly injection. [Read more.](#)

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Biotechnology Economic Contributions

California biotech industry organizations release economic impact reports
Last month, California's life science industry associations released two reports on the state of the life sciences industry in California.

BIOCOM released the first of its kind analysis of the economic impact biotechnology is having within four Southern California counties -- Orange, San Diego, Riverside and Imperial. The study shows that Southern California's life sciences cluster is one of the most vibrant, multi-faceted and innovative in the world employing just over 97,000 at 3,500 life science companies in the region. These jobs pay just over \$9 billion in wages and a total of \$33 billion in economic activity. The BIOCOM-sponsored report can be found [here](#).

The annual statewide California Biomedical Industry 2012 report released by PricewaterhouseCoopers, BayBio, and the California Healthcare Institute (CHI), reports slightly more than 267,000 Californians employed by the life sciences industry with total wages and salaries of \$20.4 billion and total estimated revenue of \$115.4 billion. These numbers show that compared to the country's and state's workforces as a whole, California's biomedical industry employment levels have remained stable in the current challenging economic climate. Click [here](#) to see full report.

Janssen Labs open in San Diego

A new 30,000-square-foot life science innovation center recently opened in San Diego. The Janssen Labs facility is located within the company's Janssen West Coast Research Center and provides a flexible lab environment for start-up biotech companies pursuing new technologies and research platforms to advance medical care. [Read more.](#)

Biotechnology Workforce Development

America's competitiveness demands innovation to bridge the education gap

A recent article by Bayer U.S. CEO outlines the importance of science, technology, engineering and mathematics (STEM) education if the United States is going to remain the global innovation leader. [Read more.](#)

CSU trains next generation of scientists

Scientific innovation has produced roughly half of all U.S. economic growth in the past 50 years and will be key to maintaining regional and statewide competitiveness. Offering a wide variety of bachelor's and master's degrees, California's State University system is preparing students for science -related careers through hands-on learning with laboratory and field experiences, faculty mentorship and in-depth theoretical learning in seminar classes. [Read more.](#)

Students get real-life high-tech lessons

About 2,500 students from around San Diego County attended the 14th annual High Tech Fair, an event that brought together more than 55 exhibitors from clean technology, energy, conservation and environmental science, aerospace engineering, healthcare and robotics. Sponsored by the San Diego Science Alliance, the fair is designed to give students an idea of the types of fields available in science, technology, engineering and math. [Read more.](#)

Member Spotlight

Bayer HealthCare

Bayer HealthCare is a global bio-pharmaceutical research, development and manufacturing company and is one of the world's leading, innovative companies in the healthcare and medical products industry. Bayer HealthCare's mission is to discover, manufacture and market products that will improve health worldwide.

Bayer HealthCare is the second largest biotech employer in the San Francisco Bay Area, with 1,800 employees at their three sites in Berkeley, Emeryville and the U.S. Innovation Center in San Francisco. Bayer has dedicated over \$100 million in capital investment to manufacture new generations of multiple sclerosis treatments and their new hemophilia therapy, Kogenate®. Additionally, Bayer HealthCare has research and development partnerships with multiple Bay Area biotech companies. In 2010 Bayer spent \$227 million on industry partners and vendors in the six Bay Area counties, and contributed \$23.3 million in California's tax base. Capital investments in the Bay Area have totaled \$558 million since 2000.

Bayer HealthCare is a caring corporate partner in local communities. In 2010 Bayer awarded \$627,200 in corporate grants for science education, diversity, patient support, and community projects in the Bay Area. Bayer also spent \$454,931 for community benefits programs - including environmental protection at Aquatic Park, auto use reduction programs, science education and award-winning workforce development programs in local public schools, and child care. The Bayer USA Foundation, the philanthropic arm of Bayer Corporation, provided a \$540,000 grant to California State University, East Bay to create the Center for STEM Education on its Hayward campus. Bayer HealthCare also provided more than \$1 million in equipment to California State University, Sacramento to enable the university to establish a tissue culture facility for their student laboratories in the Department of Biological Sciences.

Bayer HealthCare employees also serve their communities they live and work in. In 2010 Bayer volunteers supported organizations including Save the Bay, the Alameda County Food Bank, Family House at UCSF Children's Hospital, the South Berkeley YMCA, the Northern California Hemophilia Foundation, and the Multiple Sclerosis Society. Bayer was honored as Corporate Partner of the Year by the Berkeley Food & Housing Project.

Bayer HealthCare has a strong commitment to science education through its well known "Making Science Make Sense" program which provides funding and volunteer support at the K-12 grade level. In addition, Bayer HealthCare founded Biotech Partners which is an award-winning program that trains disadvantaged students at Berkeley High School for careers at Bayer and other biotech companies. Based on academics, student support, and paid internships, the program has enriched the lives of more than 2,000 students. Biotech Partners has achieved a 100% high school graduation rate, and a community college certification rate that is more than twice the statewide average. Bayer HealthCare has hired 48 program graduates, who have gone on to become department managers, complete college, and many other accomplishments. Biotech Partners has been so successful that Bayer is

working to expand the program to more schools and more high-tech industries. For more information go to www.bayerhealthcare.com.

This Month's Digital Media Picks

Below is a list of social media platforms that feature California's biotechnology and life sciences industry. Consider utilizing these tools to track industry trends, get the facts, and connect directly with industry leaders:

- Bayer's company-wide social networks and communities: <http://www.bayer.com/en/socialmedia.aspx>
 - Health Law Guide for Business YouTube channel: <http://www.youtube.com/user/HealthLawGuide>
 - BIO International Convention Twitter account: @[BIOConvention](https://twitter.com/BIOConvention)
 - BioWorld Perspectives news blog: <http://bioworld.blogs.bioworld.com/>
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Educational Material

California Biotechnology Foundation Workforce Guide

[Click here](#) to view the CBF Workforce Guide or go to www.cabiotech.org.

Calendar

2012 SoCalBio Workforce Summit - April 19, Los Angeles, CA

The SoCalBio summit will provide an opportunity to enhance the partnerships among bioscience industry executives, workforce development professionals, educators, and other state & local partners. <http://2012-socalbio-workforce-summit.eventbrite.com/>

BIO International Convention - June 18-21, Boston, MA

Hosted by the national Biotechnology Industry Organization, this event will feature a program packed with more than 125 sessions and 13 educational tracks addressing the state of global industry, emerging trends and best practices for biotech executives, investors, scientists, policy leaders, and media from around the world. <http://convention.bio.org/>

Thank You

Thank you for reading this edition of the *California Biotechnology News Update*. Be sure to check out the CBF website at www.cabiotech.org for the latest news and information regarding California's biotechnology industry.

Sincerely,
Patty Cooper
California Biotechnology Foundation