



California Biotechnology Foundation

NEWS UPDATE

News and Information from California's Biotechnology Leaders

California Biotechnology News Update

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Biotechnology Medical Breakthroughs

California Biotechnology: Fast Facts

According to the American Cancer Society, biotechnology treatments, along with other advances in diagnostics, have brought survival rates for all types of cancer up from 50 percent in 1977 to 69 percent in 2005.

California Biomedical Research Awareness Day

In collaboration with Governor Arnold Schwarzenegger, the California Biotechnology Foundation, on behalf of its board member the California Biomedical Research Association, recognized the Governor's proclamation declaring October 21 as California Biomedical Research Day. The proclamation states that "the biomedical industry in California accounts for hundreds of thousands of jobs and tens of billions of dollars in economic impact, which is also crucial to the well-being of employees, communities and our state." For more information about California Biomedical Research Day contact Patty Cooper at patty.cooper@cabiotech.org.

Cancer Rates Decline: Biotech Research Is One Reason

According to the American Cancer Society, biotech research has significantly helped with the understanding of cancer causes and helped increase survival rates among cancer patients. [Read more.](#)

Researchers Find DNA Region that Raises Risk of Ovarian, Breast Cancers

Scientists have found a region of DNA that can increase or decrease the high chance of breast cancer linked to a particular gene variant -- a finding that could help doctors keep a closer eye on women most at risk. [Read more.](#)

New Research Demonstrates Safety of Cord-blood-derived Stem Cell Treatments

New study from biotech researchers in San Diego and China demonstrates the safety and efficacy of using cord-blood-derived stem cells to treat a variety of neurological conditions. However, it also suggests cord-blood-derived stem cells are a safe and viable treatment option for a much broader range of diseases and conditions than previously thought. [Read more.](#)

Researcher at Childrens Hospital in Los Angeles Discovers a New Method to Overcome Radiation Resistance in Leukemia

New discovery reveals that radiation-resistant leukemia cells can be killed by radiation after inhibition of a molecular target by a rationally-designed new drug directed against the resistance machinery of leukemia cells. [Read more.](#)

Skin Patch Flu Vaccine Shows Promise

An influenza vaccine delivered through the skin by a dissolving microneedle patch has generated immune responses that are comparable with those triggered by needle injection. [Read more.](#)

Kite Pharma Recently Formed to Develop Immunotherapeutics for Cancer

Pharma executive Aya Jakobovits, Ph.D., is teaming up with UCLA researchers Arie Belldegrun and Owen Witte to launch Kite Pharma in Westwood, CA. Kite Pharma will focus on antigens associated with a wide variety of tumor types, and are initially being developed for the treatment of renal cell carcinoma and hepatocellular carcinoma. [Read more.](#)

AstraZeneca will Co-develop Stem Cell Cure for Diabetic Blindness

AstraZeneca signed a three-year research agreement with the University College London's Institute of Ophthalmology to discover and develop stem-cell-based drugs to treat diabetic retinopathy. [Read more.](#)

Biotechnology Economic Contributions

California Biotechnology: Fast Facts

California's biotechnology companies paid more than \$20 billion in employee wages and salaries in 2008.

Biotech Beating the Recession

Despite a rough economic ride over the past couple years, the biotechnology industry in the United States keeps growing. Like other industries, biotech has faced some obstacles—such as decreases in venture capital but the obstacles could drive biotech to become stronger. Furthermore, leading biotech states, like California are creating new approaches, from tax incentives, to workforce education, that enhance the industry. [Read more.](#)

Top 50 Biotechnology Companies & Their Pipelines 2010

Despite economic turmoil, biotechnology companies in the U.S., Europe, Canada, and Australia had a combined net profit of \$3.7 billion in 2009, a vast improvement from the \$1.8 billion net loss in 2008. [Read more.](#)

Future Funding of Stem-Cell Research Remains in Question

An appeals court recently ruled that the federal government can resume funding human embryonic stem-cell research while the court reviews whether such funding violates a 1996 law that prohibits the use of federal money for embryonic research. [Read more.](#)

Biotechnology Workforce Development

California Biotechnology: Fast Facts

The California State University system has nearly 17,250 undergraduates and 1,150 graduate students in life science degree programs.

California Biotechnology Foundation Workforce Guide

Be sure to check out the CBF Workforce Guide: [Building California's Biotechnology Work Force: a Guide to California's Career Technical Education Programs](#) which is a comprehensive inventory of statewide biotech-sponsored workforce development programs which overviews a majority of workforce development programs in California. The Guide is divided by regions and outlines education and workforce development programs in the following areas: K-12, Community College, Undergraduate and Post-Graduate, Teacher Training, Professional Development and Additional Resources. The programs listed are those which are sponsored or affiliated with California-based biotechnology companies. To view the Guide visit www.cabiotech.org. If you would like to request a copy of the Guide, contact Patty Cooper at patty.cooper@cabiotech.org.

Watch a "View from the top" interview with BIOCOM Institute Executive Director Kristie Grover who discusses the urgent need for stronger primary and secondary science education and future biotech workforce preparation, and the role biotech professionals can play in this process.

Select Committee on Biotechnology Informational Hearing

The California Biotechnology Foundation participated in the Senate Select Committee on Biotechnology informational hearing on October 1st to provide comments about education, economic contributions and workforce development opportunities in California's biotechnology sector. CBF hosted a lunch following the hearing with Senator Corbett, Chair of the Senate Select Committee on Biotechnology and a dozen Bay-area biotech industry representatives. The lunch provided the opportunity to expand the discussion to include some of the most pressing issues currently faced by the life sciences industry in California.

CSUPERB Life Sciences Workforce Summit

The California Biotechnology Foundation recently participated in a one-day Life Sciences Workforce Summit which was designed to bring together life science companies, industry associations, workforce and economic development agencies and educational institutions for a discussion on California's urgent need for an adequately educated and prepared life sciences workforce. The meeting was organized by the California State University Program for Education and Research in Biotechnology (CSUPERB) in partnership with the Los Angeles City Workforce Investment Board, California Community Colleges, Pasadena Bioscience Collaborative, and the Southern California Biomedical Council. The Summit featured many southern California based biotech companies and state and local officials including the Deputy Mayor of Los Angeles. The group shared best practices associated with "what works" in private-public partnerships for life sciences workforce development and future workforce needs and opportunities associated with the biotechnology sector. CSUPERB plans to hold future workforce summits in the coming months. For more information contact Susan Baxter at sbaxter@mail.sdsu.edu.

Watch a “View from the Top” interview with CSUPERB Executive Director, Susan Baxter

California Bio-Pharma Sheet Metal Tour

The California Biotechnology Foundation had the unique experience of participating in a California Bio-Pharma Labor Management Association’s tour of two facilities in the San Jose-area that provide skilled union labor and materials, equipment, supplies and contracting services to California’s biotechnology industry. The tour began at the Sheet Metal Workers’ Local 104 Training Center that teaches apprentices the skilled work of fabricating sheet metal into specified materials and then installing it at a jobsite. The second part of the tour was conducted at THERMA Corporation, a 280,000 square foot facility on 16 acres of land. THERMA provides mechanical contracting for industrial, commercial and biomedical companies. THERMA employs over 1,500 people including more than 1,000 craftsmen from the Pipefitters, Plumbers and Sheet Metal unions and is currently the largest union construction employer in the Bay Area and one of the largest suppliers to biomedical facilities in California. Both tours reinforced the complex and multi-faceted equipment and facility needs of the biotech industry, the types of materials used in life sciences research, development, and manufacturing, and some of the skilled union labor that is required in order to support daily operations such as heating, ventilation and air conditioning, clean rooms, special exhaust systems, process piping, plumbing, refrigeration, acid neutralization, energy conservation, environmental and process controls.

Career Technical Education Funding Approved in Last Round of \$500 Million in Proposition 1D Funds

The State Allocation Board recently approved the final funding round for the Career Technical Education Facilities Program (CTEFP). The CTEFP funding represents nearly \$93.7 million for 77 projects statewide. [Read more.](#)

UC Berkeley Extension Expands Biotechnology Offerings

Biotechnology professionals in the Bay Area have three new options for career development from UC Berkeley Extension. The professional programs in Regulatory Affairs, Biopharmaceutical Product and Process Development, and Bioscience Manufacturing and Supply Chain join the education leader’s lineup of programs and certificates designed to meet the biotechnology industry’s demand for trained professionals. [Read more.](#)

Local Bond Measure Helps San Mateo High School Build Biotechnology Complex for Students

The new state-of-the-art facility is just one of many current and planned campus-improvement projects throughout the San Mateo Union High School District funded by the \$298 million Measure M bond, which voters passed in 2006. [Read more.](#)

California Biotechnology Foundation Member Spotlight

BayBio

BayBio is an independent, non-profit 501(c)(6) trade association serving the life science industry in Northern California. The staff and services of BayBio are paid primarily through memberships, sponsorships, and event registration fees. BayBio provides these services through representatives in Northern California and coalition partners in Washington, DC.

With the support of more than 450 member organizations, BayBio is Northern California’s life science association. They support the regional bioscience community through advocacy, enterprise support, and the enhancement of research collaboration. BayBio members include organizations engaged in, or in supportive of, research, development and commercialization of life science technologies.

BayBio advocacy includes working with elected officials, coalitions and other industry organizations to promote the needs and interests of BayBio members, including working diligently to improve the business environment for the life sciences community in Northern California.

In 2010, the BayBio Institute launched Bio-Community.org to connect life science professionals with students and teachers. Bio-Community.org reflects the Northern California life science industry’s commitment to science education and biotechnology career development. Bio-Community.org provides critical support to under-resourced grade 7-14 classrooms and students with limited exposure to science and science role models. By harnessing the experience and passion of life science professionals, Bio-Community.org facilitates meaningful collaborations that will profoundly impact science, technology, engineering and math (STEM) education in the region.

For more information about BayBio go to: www.BayBio.org.

California Biotechnology Foundation Website

Be sure to check out the CBF website at www.cabiotech.org for the latest news and information regarding the California biotechnology industry.