

BIOTECHNOLOGY: FACTS AND FIGURES



- Biotechnology means any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use. (*United Nations Convention on Biological Diversity*)
- Biotechnology helps create products and services that have the potential to improve our quality-of-life by preventing and treating disease, creating a safer food supply and producing energy in new and more efficient ways.
- The biosciences - including all life-sciences activities - employed 1.3 million people in the United States in 2006 and supported an additional 7.5 million related jobs. U.S. publicly traded biotech companies alone spent \$27.1 billion on research and development in 2006. (*BIO*)
- The American Recovery and Reinvestment Act allocates \$7.4 billion to the National Institutes for Health to support additional scientific research, including:
 - \$200 million to support biomedical and behavioral research.
- The Illinois biotech cluster includes over 1,400 establishments and 49,000 employees, and is supported by Illinois' federal labs as well as the state's top-notch research universities. (*DCEO*)

ILLINOIS: A CENTER FOR BIOTECHNOLOGY

World-Class Research

- Illinois is a center for biotechnology research and development and ranks highly among U.S. states:
 - In 2006, Illinois ranked second nationally in conferring bioscience-related degrees. (*BIO Technology, Talent and Capital: State Bioscience Initiatives 2008*)
 - Illinois is the top producer of biomass, plant material from which other products can be made. (*iBIO*)
- Further investment in Illinois-based biotechnology research and development could lead to substantial job growth and strengthen state and regional economies.
 - Each bioscience job is estimated to result in 5.7 additional jobs. Wages of biotech workers are higher than average private industry counterparts. (*Battelle and BIO "Growing the Nation's Bioscience Sector: State Bioscience Initiatives 2006"*)
- Illinois is home to world-renowned university programs, federal labs and leading businesses or corporations including: Abbott Laboratories, Argonne National Laboratories, Astellas Pharma, Baxter International, Hospira, Takeda and many smaller firms and start-ups. (*DCEO*)
- In Illinois, academic research expenditures in the biosciences totaled \$1.2 billion in 2006, mainly in medical sciences (\$613 million) and biological sciences (\$372 million). (*BIO Technology, Talent and Capital: State Bioscience Initiatives 2008*)

Investing in Illinois' Biotech Community

- Illinois was the first state in the Midwest and only the fourth state in the nation to commit public funds to regenerative medicine research (e.g. stem cells), investing \$15 million to date.
- Illinois was the first state to completely eliminate the state sales tax on E-85 and biodiesel blends of 11 percent and higher ("B11"), dramatically increasing E-85 sales and creating the largest biodiesel market in the nation.

Robust Life Sciences R&D

- Illinois pharmaceutical and biotechnology companies are currently developing 398 medicines and vaccines for several diseases, including the leading causes of death and disease in the United States. (*PhRMA*)
- Illinois pharmaceutical and biotechnology companies are developing 41 of the 312 medicines in development nationwide for heart disease and stroke as well as 80 medicines to treat or prevent cancer – nearly 10 percent of the total medicines being developed nationwide.
- Illinois companies are also developing 24 medicines for Alzheimer's, 58 medicines for infectious diseases, and 21 medicines for diabetes. (*PhRMA*)