

CAMBRIDGE:

*The Brains of Biotech,
the Heart of Innovation!*



Cambridge's universities, institutes and life sciences firms
continue our longstanding tradition of creativity

Welcome to Biotech in Cambridge

Cambridge continues to reinvent itself. Over the past decade, biotechnology has emerged as a most important focus for our business community. With our roots in the American Revolution, Cambridge continues to be one of the most innovative cities on the planet; at the same time, Cantabrigians care deeply about the quality of life here and strive to maintain the special qualities of this historic community. Our history of revolutionary thinking forms the backdrop for the current revolution in genomic research, nanotechnology and brain science.

Why has Cambridge become one of the world's most important biotech centers? This is a great place in which to work, reside and enjoy a diverse array of cultural activities. Further, we have access to an unmatched pool of talent and a wealth of institutional resources.

We are excited to be one of the world's major biotech centers. Moving forward, new people and ideas are welcomed as we work toward the goal of keeping Cambridge true to itself—celebrating our diverse history as we look to an ever-improving future. I hope that this brochure helps you understand why Cambridge is such a great place for biotech and a wonderful community overall.

Sincerely,

Robert W. Healy, City Manager
Cambridge, Massachusetts
www.cambridgema.gov
www.CambridgeBiotech.org



Photo courtesy of Forest City Enterprises

The center of Cambridge biotech activity is Kendall Square and University Park, in the middle ground of this photo, with downtown Boston in the background across the Charles River.



72% of Cambridge adults are college graduates, 43% have graduate degrees



Cambridge region benefits from the world's largest concentration of biotechnology and medical institutions

1830
A group from the Massachusetts Bay Company settles in Cambridge

Harvard University established
1636

George Washington occupies Brattle Street home later owned by Henry Wadsworth Longfellow
1775

Largest Biotechnology Firms in Cambridge: Genzyme Corporation, Biogen Idec Inc.,

A Great Place to Live and Work

Cambridge is a very special community, in a culturally rich and diverse region, unrivaled in its appeal for life sciences endeavors. More than 100 colleges and universities, Massachusetts General Hospital and the Longwood Medical Center are close by. The regional transit system makes it easy to go from downtown Boston to points in Cambridge in only minutes. Logan International Airport, with easy connections to Europe, is about 20-30 minutes away by public transit, taxi or car.



Massachusetts Avenue (known locally as “Mass Ave”) and the Red Line of the MBTA connect the MIT campus, Central Square, Harvard Square and Porter Square, with extensive bus and trolley lines covering the city.

A dense, vibrant city of 100,000 people, living in 6.26 square miles, Cambridge offers a uniquely walkable environment with many pleasant neighborhood settings.

These include pre-revolutionary mansions along Brattle Street, close-knit communities like East Cambridge, which was developed to serve as housing for workers in the traditional industrial districts, and interspersed among these historical areas, a mix of modern apartments and condominiums. Scattered throughout the community are some



80 parks, squares and playgrounds, all well-used by the community.



1820
First commercially
manufactured varnish in
the United States

1845
Elias Howe perfects sewing
machine model

1876
First long distance phone call:
Kilby Street, Boston to Osborn
Street, Cambridge

A Look at Top Biotech Employers in Cambridge

The strong presence of over 65 venture capital firms in the Boston metropolitan area is helping to fuel the growth of biotech in Cambridge. Of the over 130 life science-related companies in Cambridge, the top employers headquartered here demonstrate the breadth of endeavors underway.

Genzyme - a Sanofi Company

The company's areas of expertise include cell, gene and protein therapies; drug discovery and development; surgical biomaterials; diagnostics; and genetics and genomics.

Genzyme has grown in Cambridge. Its most dramatic new growth is into a new headquarters, just a block from the Kendall transit station and the MIT campus. The building uses green technology, having received the highest rating given by LEED—the platinum category.

This project was constructed on a brownfields site where coal used to be turned into gas for energy consumption. The new building is beautifully daylight, with sunlight sent into an atrium via tracking mirrors on the roof and with many interior planted areas.



Peter Vanderwater



Biogen Idec

Biogen Idec creates new standards of care in oncology and immunology. As a global leader in the development, manufacturing and commercialization of novel therapies, Biogen Idec transforms scientific discoveries into advances in human healthcare.

Millennium Pharmaceuticals: A Takeda Oncology Company

Millennium markets Velcade for Injection, a novel cancer product; co-promotes Integrilin Injection, a market-leading cardiovascular product; and has a robust clinical development pipeline of product candidates. The company's research, development and commercialization activities are focused in three therapeutic areas: oncology, cardiovascular and inflammation.

Novartis Institutes for BioMedical Research

With two laboratories in Cambridge, Novartis Institutes for BioMedical Research employs 1,500 scientists who are utilizing cutting-edge technologies to explore the intersection of the chemical and biological universes in order to develop new medicines to improve human health.

Pfizer Pharmaceuticals

Pfizer is one of the world's largest research-driven pharmaceutical and health care products companies with a long history in the discovery and development of pharmaceuticals and vaccines through biotechnology. Leading products are in the areas of women's health care, neuroscience, musculoskeletal disorders, infectious diseases, hemophilia, inflammation and oncology.

Sanofi-Aventis

Sanofi-Aventis, the world's third largest pharmaceutical company is developing treatments for cardiovascular disease, thrombosis, cancer, diabetes, central nervous system disorders, internal medicine and vaccines.

1892
Nabisco introduces the Fig Newton at its Cambridge bakery

1916
MIT moves from Boston to Cambridge

1931
Vannevar Bush and colleagues develop the first analog computer

A Look at Top Information Technology Companies

Google

From the beginning, Google has been working on technology that can improve on existing ways of doing business. Google provides a variety of services and tools for advertisers of all sizes, from simple text ads to display and mobile advertising, and to publishers, whether small or large.

Google succeeds when the tools that they have built are useful to their users, advertisers and other partners. The root of their business is to provide useful and relevant information to the millions of people around the world who rely on Google search to provide the answers they are seeking.

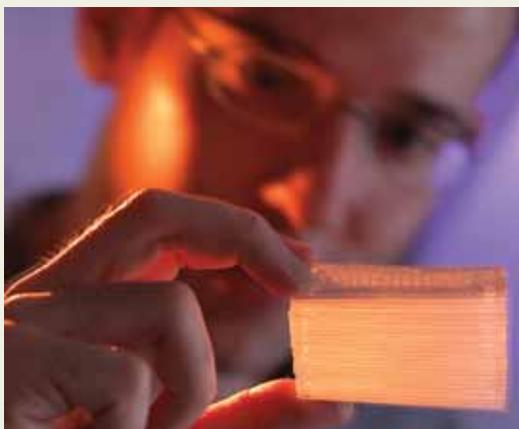
Microsoft New England Research & Development Center (NERD)

NERD "vertical" campus is conveniently located in Kendall Square and spans two buildings. NERD was founded with the recognition that the greater Boston area is home to the world's leading universities, cutting edge technology, biotech and healthcare companies as well as a vibrant investment and startup community. With the opening of the Cambridge campus, Microsoft is well positioned to work with a highly educated local talent pool and build a strong permanent R&D presence.

NERD is home to some of Microsoft's most strategic teams including Microsoft Research New England, Microsoft Application Virtualization (App-V), SharePoint Workspace, Microsoft Technical Computing, Microsoft Advertising, Microsoft Lync, Microsoft Office 365 and more. Microsoft now employs close to 1,000 individuals in Massachusetts.

Akamai

If you use the Internet for anything – eCommerce, enterprise cloud computing, software downloads, Web marketing or HD Video – you've probably used Akamai's services without even knowing it. Akamai plays a critical role in making the Internet work for business.



Akamai's platform addresses the challenges and makes it easier for companies to be successful online by ensuring performance, instant scalability, robust security and useful data. Today Akamai handles tens of billions of daily Web interactions for companies like Audi, NBC, and Fujitsu and organizations like the U.S. Department of Defense and NASDAQ – powering brand new business models that serve the changing online economy.

**Of the 100 largest
biotechnology firms
in Massachusetts,
36 are located
in Cambridge.**

Source: 2007 Book of Lists, Boston Business Journal



**Since 2000,
63 Cambridge-based
biotech companies
have raised
\$2.9 billion
in venture
capital financing.**

Source: VentureXpert, Thomson Financial Venture Economics

1946
Edwin Land develops
instant photographs

1957
John C. Sheehan
achieves first chemical
synthesis of penicillin

1968
BBN Technologies creates
the ARPANET, the
predecessor of the Internet

OPK Biotech LLC, Infinity Pharmaceuticals Incorporated,

The Universities Create Leaders in Biotech

Cambridge is particularly fortunate to be the home of two of the world's most renowned institutions, Harvard and MIT. Combined, these two universities employ over 15,000 people. Of the important roles both play in all aspects of Cambridge life, their positive impact on job creation and technology transfer are paramount.

Harvard University

Founded in 1636, Harvard predates the establishment of the United States by more than a century. Three hundred and fifty years of Harvard's history in this community have helped shape Cambridge in innumerable ways. The city benefits from the close intertwining of campus, surrounding neighborhoods, the Harvard Square commercial area and the Charles River.

One of the highest priorities for Harvard is the strengthening of interdisciplinary work in the sciences, with the recently completed Laboratory for Integrated Science and Engineering (LISE) building the most recent manifestation of that policy. LISE will provide high-quality interdisciplinary laboratory space (for physics, chemistry, chemical biology, engineering and applied sciences) in a new Center for Mesoscale Structures and Materials.

Massachusetts Institute of Technology

MIT, which has spawned many high tech companies in its 92 years in Cambridge, has taken several steps to build upon its formidable lead in world research in the life sciences, including its support for the Whitehead Institute for Biomedical Research (completed in 1984) and state-of-the art Biology Building (completed in 1991).

Across the street from the exuberant Stata Center, designed by renowned architect Frank Gehry, is the new Brain and Cognitive Sciences Center. The center is a model for the way disciplines intersect on the emerging scientific frontier; it promises to become a leading center for brain research, integrating the study of neuroscience, cognitive science, imaging technology, genetic science and molecular and cellular biology.



**100 Nobel Laureates
are Harvard
or MIT affiliates**

**From 1998 to 2003,
88 separate
agreements were
executed for technology
developed by MIT
or Whitehead**



Photo: Frank Gehry

1993
Lotus 1-2-3,
the spreadsheet program,
is released to the market

1995
Genzyme Tissue Repair's Epicel
process for growing new skin
is approved for marketing

1993
MIT researchers discover link
between gene mutation and
Lou Gehrig's disease

Ariad Pharmaceuticals, Ironwood Pharmaceuticals Inc., Archemix Corporation,

The Private Institutes Broaden the Field

Numerous private institutes complement the city's academic and commercial entities.

The Whitehead Institute

Since 1982, the Whitehead Institute for Biomedical Research has developed an internationally renowned research program with path-finding activities in cancer and HIV research, structural biology, genetics, infectious disease research, developmental biology and transgenic science. The Institute is an international leader in the Human Genome Project. It was the largest federally funded center for genome mapping and contributed a third of the human genome sequence announced in June 2000.

The Broad Institute

Unprecedented cooperation among MIT, Harvard and the Broad family, with each party contributing \$100 million, has led towards the creation of a new center for genomic research, the Broad Institute, which opened in 2006.

The Center for Integration of Medicine and Innovation Technology in Cambridge

This center is a collaboration of Draper Labs, Partners Health Care, Massachusetts General Hospital, Brigham & Women's Hospital and MIT. The work focuses on microsensors for clinical applications and homeland defense, including a sensor to detect bioterrorism agents such as anthrax.



Mason Moritt

Scientists in the Biomedical Engineering group at Draper are using MEMS sensor technology to develop biological threat monitoring systems for building protection.

Cambridge Biotech Taps Educational/Medical Resources

Cambridge companies benefit from an unmatched array of excellent nearby educational and medical organizations:

- Massachusetts General Hospital
- The Longwood Medical Area
- The Boston University Medical Center
- The New England Medical Center
- Medical Schools at Boston University, Harvard and Tufts.

The map also shows the proximity of Cambridge to Logan Airport.



Whitehead Institute succeeds
in human genome
mapping project

Novartis begins its move
from Switzerland
to Cambridge

MIT, Harvard and The Broad
Foundation break ground
for the new Broad Institute

Idenix Pharmaceuticals, Metabolix Inc., Pfizer Pharmaceuticals, Idera Pharmaceuticals



Cambridge, an excellent home for biotech, a great place to live

Clockwise from top left: Canoeing on the Charles River during the annual Cambridge River Festival, a stroll in an evening snow storm, messy hands at a street fair, smiling kids, a summertime dance performance, enjoying the sunshine in a City park on the public art, a strategic game of chess, fresh produce from the Central Square farmer's market and studying in Harvard Yard. The cultural diversity, intellectual talent and institutional resources add to the vitality and innovation of this special city.



Pat Schmitt



Cambridge Museum/Chris Hooper



David Parker - Scudger

Robert W. Healy, City Manager

Richard C. Rossi, Deputy City Manager

CAMBRIDGE CITY COUNCIL

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For further information about Cambridge and its biotech environment, please contact:
www.CambridgeBiotech.org

Cambridge Community Development Department

Economic Development Division • 344 Broadway, Cambridge, MA 02139 • 617-349-4600 • www.cambridgema.gov

The Broad Institute moves into its new facility in Kendall Square

Cambridge is uniquely positioned to support growth in the life sciences

Cambridge continues to be a special place to live, work and play