

How Yale's Stem Cell Research Strengthens the State Economy

In today's knowledge economy, biomedical research gives physicians critical tools to combat disease and directly boosts economic growth. Researchers at the 10-year-old Yale Stem Cell Center have contributed on both counts. Because research can take decades to have an impact, both in medicine and business, the best is yet to come.

State funding has played a critical role in the Center's emergence as a national leader in stem cell research. It has enabled Connecticut to remain competitive with California and Massachusetts, among other states.

There's a direct correlation between dollars invested in research and economic growth. Research dollars lead to inventions. Inventions lead to new therapies and treatments. And new therapies and treatments spawn startup activity and jobs.

450+

Faculty Members,
Students and
Post-Docs Involved

214

Jobs Created

\$52 Million

In Connecticut
Funding

\$447 Million

From Other Sources,
Leveraging the
State Investment

Three major therapies in clinical trials



1. Using cell-based tissue engineering to cure congenital heart defects
2. Using skeletal stem cells to treat stroke
3. Using skeletal stem cells to treat spinal cord injury

352 patent applications filed and 49 licenses granted



One of the patent applications covers a method for using stem cells derived from a patient's bone marrow to construct new blood vessels that can be used in the repair of diseased lungs.

A wide-open future



Finding a cure for a single disease can help millions of people, generate companies and produce thousands of jobs. Since 2000, over 50 startups in the New Haven area based on Yale inventions have raised over \$5 billion in equity investments. Companies based on Yale inventions employ over 1,500 people in New Haven.