

# Biomedical Research Funding-at-a-Glance **Massachusetts**



## National Institutes of Health Funding for Massachusetts<sup>1</sup>

- In FY2016, Massachusetts received 5,029 NIH-funded grants through normal appropriations process, totaling \$2,572,549,176.
- This represents an increase of \$148 million from FY2015 but 137 more grants.

## National Science Foundation Funding for Massachusetts<sup>2</sup>

- In FY2016, NSF provided 1,285 awards totaling over \$448 million.

## NIH Helping Communities

### What does NIH funding mean for the Massachusetts economy?

- In FY2007, each NIH dollar invested in Massachusetts generated \$2.14 in new state business activity<sup>3</sup>.
- In FY2016, the NIH supported \$6.011 billion in economic activity and 31,019 jobs<sup>4</sup>.

### Life Science Industry Impact

- Massachusetts has 514 medical device companies, 232 drug development firms, and 147 contract research and manufacturing enterprises<sup>5</sup>
- Employment in the biopharma industry rose to 60,459 in 2014, 2,800 professional more than in 2013<sup>6</sup>.
- The industry's economic impact generated \$7.29 billion for the state<sup>6</sup>.

### Scientific developments made possible through NIH Funding

- Harvard University's Stem Cell Institute has published a study on a treatment aimed at destroying existing blood cells using antibodies, far less harmful and more precise than chemotherapy<sup>7</sup>.
- A low-cost, rapid paper-based diagnostic tool to test for Zika was developed by Harvard University. It screens bodily fluids within two to three hours using synthetic gene networks<sup>8</sup>.
- A Boston University team will develop synthetic macromolecules to inhibit proteins in the human genome that could be used for attenuating inflammation<sup>9</sup>.

*"The commonwealth of Massachusetts is a national leader in Digital health. Built on the state's strong foundation in cutting-edge hospitals and innovative tech companies, the active and vibrant digital health cluster is on a path to extensive growth<sup>10</sup>."*

Industry experts say that Massachusetts could be the next Silicon Valley<sup>5</sup>

As of October 2016, there were 14,629 clinical trials in MA<sup>11</sup>



<sup>1</sup>All information current as of 7/2017, as stated at [www.nih.gov](http://www.nih.gov)

<sup>2</sup>All information current as of 7/2017, as stated at [www.nsf.gov](http://www.nsf.gov)

<sup>3</sup>In Your Own Backyard: How NIH Funding Helps Your State's Economy, Families USA's Global Health Initiative, June 2008

<sup>4</sup>United for Medical Research Report, NIH bystate2016

<sup>5</sup>Top 12 Hot Biopharm Regions for Growth and Expansion, Renee Morad 2014, Biospace.Com

<sup>6</sup>MA Life Sciences Industry Sees Record Jobs Growth, Massbio 2015

<sup>7</sup>Making Bone Marrow Transplants Safer, Hannah L. Robbins 2016, Harvard Gazette

<sup>8</sup>Paper Disc Can Quickly Detect Zika Virus in the Field, Kat J. McAlpine 2016, Harvard Gazette

<sup>9</sup>BU Team Awarded \$1.6 Million NIH Grant, BU Arts and Sciences 2010

<sup>10</sup>Massachusetts: A Top Global Destination for Digital Health, Massdigitalhealth.Org

<sup>11</sup>Clinicaltrials.gov, NIH 2016

