

# Scientific Research and Development in the U.S. and Around the World

By [Global Research News](#)

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Region: [USA](#)

Theme: [Science and Medicine](#)

*The U.S. spends more money than any other country in the world on scientific research and development.*

*But do those billions of dollars translate into breakthroughs, and what does the future hold?*



Source: [SuperScholar.org](https://www.superscholar.org)

The U.S. spends more money than any other country in the world on scientific research and development. But do those billions of dollars translate into breakthroughs, and what does the future hold?

## Who Spends What?

Here's a look at where the R&D spending in the world happens, by region:

Americas 36.0%

Asia 36.7%

Europe 24.1%

Rest of world 3.2%

The U.S. by far outspends every other country in the world on scientific research and development at more than \$400 billion. But what about when that spending is compared to our total gross domestic product?

*Country Total R&D spending (U.S. dollars)*

United States \$436 billion

China \$198.9 billion

Japan \$157.6 billion

Germany \$90.6 billion

South Korea \$56.4 billion

France \$51.1 billion

United Kingdom \$42.4 billion

India \$41.3 billion

Brazil \$30 billion

Canada \$28.6 billion

Russia \$26.9 billion

Italy \$24.4 billion

Taiwan \$22.3 billion

Australia \$21.8 billion

Spain \$20.4 billion

Sweden \$14.4 billion  
Netherlands \$13.7 billion  
Switzerland \$10.4 billion  
Israel \$10.3 billion  
Austria \$9.9 billion  
Turkey \$9.7 billion  
Singapore \$8.8 billion  
Belgium \$8.6 billion  
Finland \$7.7 billion  
Mexico \$6.8 billion  
Denmark \$6.6 billion  
Poland \$5.7 billion  
South Africa \$5.5 billion  
Norway \$5.1 billion  
Czech Republic \$4.3 billion  
Argentina \$4.2 billion  
Portugal \$4.1 billion  
Malaysia \$3.3 billion  
Ireland \$3.2 billion  
Hungary \$2.4 billion  
Indonesia \$2.4 billion  
Romania \$1.8 billion  
Saudi Arabia \$1.8 billion  
New Zealand \$1.6 billion  
Greece \$1.6 billion

*Country R&D spending as a percentage of GDP*

Israel 4.20%

Finland 3.80%  
Sweden 3.62%  
Japan 3.48%  
South Korea 3.45%  
  
Denmark 3.08%  
Switzerland 3.00%  
Germany 2.87%  
United States 2.85%  
Austria 2.75%  
Singapore 2.65%  
Taiwan 2.38%  
Australia 2.28%  
France 2.24%  
Belgium 2.03%  
Canada 2.00%  
Netherlands 1.90%  
Norway 1.85%  
United Kingdom 1.84%  
Ireland 1.75%  
Portugal 1.67%  
China 1.60%  
Czech Republic 1.55%  
Spain 1.42%  
Italy 1.32%  
Brazil 1.25%  
New Zealand 1.22%  
Hungary 1.20%

Russia 1.08%

South Africa 0.95%

Turkey 0.90%

India 0.85%

Poland 0.72%

Malaysia 0.70%

Romania 0.66%

Argentina 0.61%

Greece 0.50%

Mexico 0.39%

Saudi Arabia 0.25%

Indonesia 0.20%

## **Where the Money Goes**

Here's a look at the areas where most of the research is focused, by country:

### **U.S.**

National defense

Health

Space/flight research

### **China**

Nanotechnology

Clean energy

Stem cell research

New labs and institutes

### **Japan**

Energy conservation/new energy sources

Housing

Robot technology

Life sciences

## **Germany**

Environment

Health

Physics

Aerospace/ transportation.

## **South Korea**

Nanotechnology

Space

Bioscience/biomedicine

## **France**

Renewable energy

Cancer

Communication technology

Space

## **United Kingdom**

Engineering

Physical sciences

Medicine

Biotechnology

## **India**

Agriculture

Biotechnology

Nanotechnology

Climate change

## **Canada**

Aerospace

Information/communication technologies

Oil/gas extraction

Pharmaceutical/medicine manufacturing

## **Russia**

Life sciences

Biopharmaceuticals

Nanotechnology

## **The Biggest Brains?**

Which countries are poised for the biggest and best breakthroughs over the next decade?

*Scientific and engineering researchers per capita*

- Finland
- Sweden
- Japan
- Singapore
- Denmark
- Norway
- United States
- Australia
- Canada
- New Zealand

*Patents per capita*

- United States
- Japan
- Switzerland
- Finland
- Israel
- Sweden
- Germany
- Canada
- Denmark
- Hong Kong

*Countries that will have the greatest scientific impact in 2020, according to Nature magazine readers*

China 59%

United States 36%

India 29%



Germany 23%

Japan 22%

United Kingdom 19%

Brazil 16%

Australia 13%

Canada 11%

France 8%

### **Cause for Concern?**

Budget cuts in the U.S. have led many scientists and researchers to sour on the U.S.

### **Nearly 1 in 5**

American scientists considering pursuing their research overseas

**67%**

Scientists and researchers who say they're getting less grant money than in 2010

### **More than 1 in 2**

Researchers with colleagues who've lost a job or expect to soon

### **Bright Outlook?**

While budget cuts may be hindering some research in the U.S. now, scientists around the world still consider the U.S. an attractive location to conduct their work.

*To which countries would you consider relocating?*

United States 56%

United Kingdom 55%

Canada 51%

Australia 46%

Germany 45%

France 37%

Japan 17%

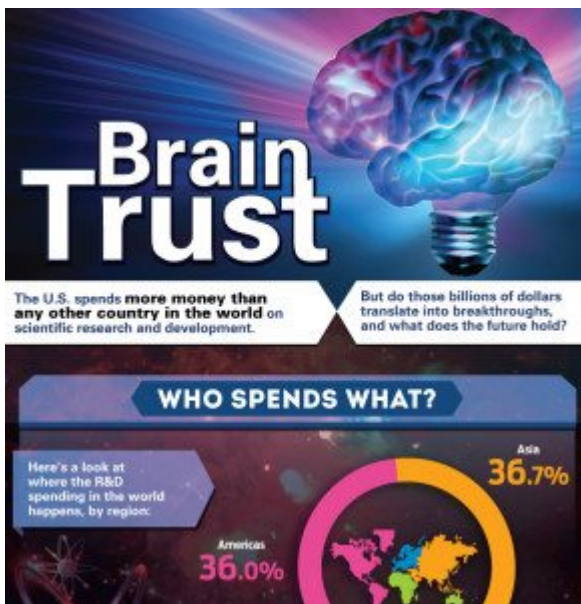
Brazil 12%

India 9%

China 8%

**Sources:**

- <http://battelle.org>
- <http://www.nsf.gov>
- <http://www.npr.org>
- <http://www.investopedia.com>
- <http://cordis.europa.eu>
- <http://www2.cnrs.fr>
- <http://media.education.gouv.fr>
- <http://oia.ncsu.edu>
- <http://industrytoday.com>
- <http://www.bioworld.com>
- <http://martinprosperity.org>
- <http://www.huffingtonpost.com>
- <http://www.nature.com>



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