

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

By [Global Research News](#)

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SuperScholar.org

Region: [USA](#)

Theme: [Science and Medicine](#)

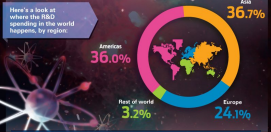
*The U.S. spends more money than any other country in the world on scientific research and development.*

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

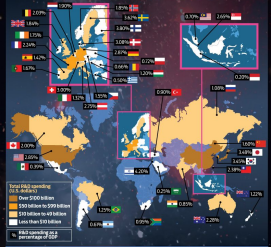
# Brain Trust

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## WHO SPENDS WHAT?



The U.S. is by far outpace all 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?

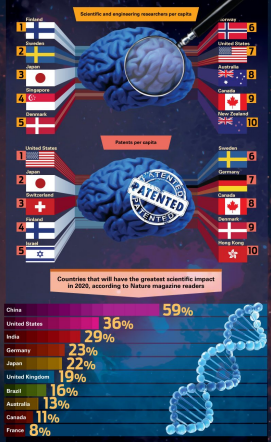


## WHERE THE MONEY GOES

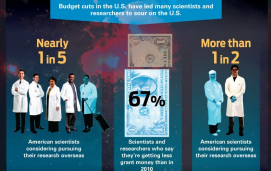
Here's a look at the areas where most of the research is focused by country.



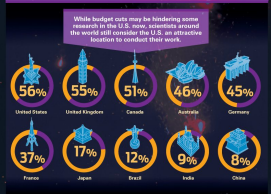
## THE BIGGEST BRAINS?



## CAUSE FOR CONCERN?



## BRIGHT OUTLOOK?



Source: [SuperScholar.org](http://SuperScholar.org)

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## 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:

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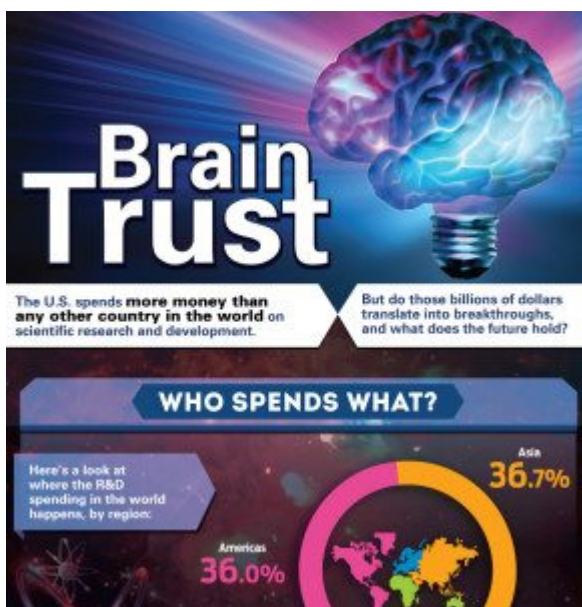
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