

**OVERVIEW:** Research and development is a critical contributor to innovation and long-term economic growth, and the United States has a long history of being a global leader. According to a new collaborative report from The Council of State Governments and Elsevier—"America's Knowledge Economy: A State-by-State Review"—the United States published more than 536,000 publications in 2013. Predictably, states with larger populations also tended to publish more. For example, California and New York were the top two producers from 2004 to 2013. From 2004 to 2013, a big chunk of United States publications—more than one-quarter—focused on the field of medicine. Over the same period, Massachusetts and California produced the most impactful research—also called field-weighted citation impact—among all states. This brief offers a state-specific snapshot of data pulled from the report. To read the full report, visit [www.csg.org/knowledgeeconomy](http://www.csg.org/knowledgeeconomy).

## 2.46 PUBLICATIONS

PER 1,000 RESIDENTS, 2013

U.S. Average: 1.70 publications per 1,000 residents

## FIELD-WEIGHTED CITATION IMPACT, 2004–13

**1.56** Cited 56% more than  
global average

### MOST IMPACTFUL RESEARCH FIELD

## PHYSICS & ASTRONOMY

Ranked 8<sup>th</sup> among all states in terms of research impact  
and cited **25% more** than the U.S. average.



## INDIANA

### TOP COLLABORATING STATE, 2004–13

3,444 collaborations (5.0% of all of Iowa's publications)

### GROWING RESEARCH STRENGTH IN PHARMACOLOGY, TOXICOLOGY, & PHARMACEUTICS, 2004–13

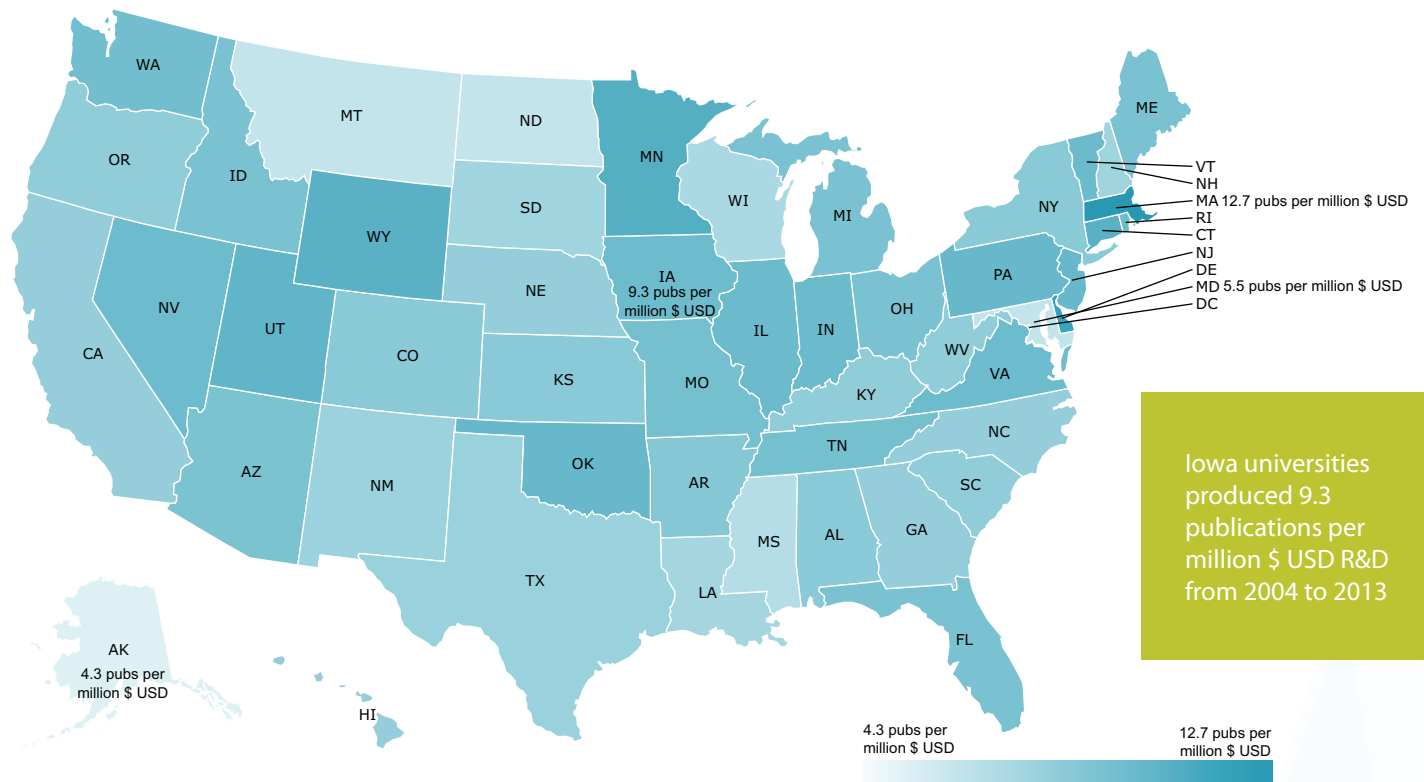
**14<sup>th</sup> among all states in terms of relative impact of research, 4<sup>th</sup> among all states  
in terms of growth in relative impact.**

### GROWING RESEARCH STRENGTH IN PSYCHOLOGY, 2004–13

**12<sup>th</sup> AMONG ALL STATES** in terms of relative impact of research in psychology.

# America's Knowledge Economy: A State-by-State Review | IOWA

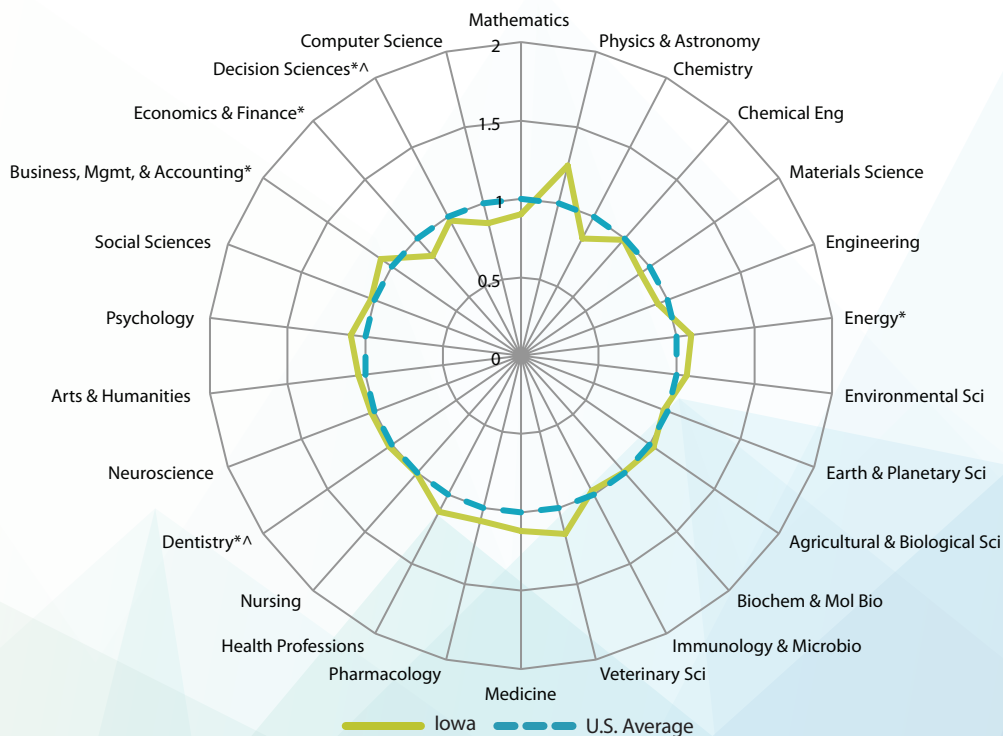
Number of academic publications per million \$ USD in higher education R&D expenditures for U.S. states, 2004-13 (in 2013 \$)



Iowa universities produced 9.3 publications per million \$ USD R&D from 2004 to 2013

Source: Scopus® and NSF Higher Education Research and Development Survey

## Impact Across Research Fields, 2004-13



Iowa's research in physics and astronomy is cited 25% more than the U.S. average

\* and ^ indicate the state did not produce more than 100 publications in that research field for 2004 or 2013, respectively.

Source: Scopus®