

For the first time, China has overtaken the United States in terms of the total number of science publications, according to statistics compiled by the US National Science Foundation (NSF). The agency's report, released on 18 January, documents the United States' increasing competition from China and other developing countries that are stepping up their investments in science and technology. Nonetheless, the report suggests that the United States remains a scientific powerhouse, pumping out high-profile research, attracting international students and translating science into valuable intellectual property.

The shifting landscape is already evident in terms of the sheer volume of publications: China published more than 426,000 studies in 2016, or 18.6% of the total documented in Elsevier's Scopus database. That compares with nearly 409,000 by the United States. India surpassed Japan, and the rest of the developing world continued its upward trend. But the picture was very different when researchers examined where the most highly cited publications came from. The United States ranked third, below Sweden and Switzerland; the European Union came in fourth and China fifth. The United States still produces the most doctoral graduates in science and technology, and remains the primary destination for international students seeking advanced degrees — although its share of such students fell from 25% in 2000 to 19% in 2014, the report says. The United States spent the most on research and development (R&D) — around US\$500 billion in 2015, or 26% of the global total. China came in second, at roughly \$400 billion. But US spending remained flat as a share of the country's economy, whereas China has increased its R&D spending, proportionally, in recent years. (Fonte: www.nature.com 09-01-18)

