

# nature INDEX 2019 ANNUAL TABLES

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## BEHIND THE NUMBERS

We are delighted to present the Nature Index Annual Tables. The rankings for 2018 revealed in this print and online supplement highlight the institutions and countries with the highest outputs of top-quality research in the natural sciences. Our measure, fractional count (FC), is based on the share of articles published in 82 prestigious scientific journals, selected by an independent panel of scientists and tracked by the Nature Index database. The fractional count is more fully explained on S3.

Although we rank institutions by comparing their FC, we recognize there are many qualities that distinguish them. There are also many possible causes of a decrease in an institution's publications in Nature Index journals from year to year. Yet, the specificity of our metric is also its strength: top-notch research in the natural sciences, pure and simple.

Renowned institutions — often with advantages conferred by long history, good reputation, generous funding, and size — reign over the research ranks as might be expected. It is interesting, then, to see how the rankings change when we consider an institution's Nature Index output as a proportion of its overall output in the natural sciences, as a way of seeing which institutions might be punching above, or below, their weight.

This normalized ranking, showing what share of an institution's research output in the natural sciences has been judged high quality, reveals a very different set of leaders among academic institutions. Some of them have tiny article



**The National Institutes of Health, ranked 2nd in the life sciences, has the largest zebrafish genome library in the United States.**

counts compared to the likes of Harvard: the Cold Spring Harbor Laboratory in New York is number one, yet comes 347th in our Annual Tables; the 30-year-old Jawaharlal Nehru Centre for Advanced Scientific Research of Bangalore, India, is 7th in the normalized ranking and otherwise 422nd. Princeton University is an impressive 10th normalized and 25th otherwise. Some academic institutions fare much worse than their reputations might predict, and others, much better. As the normalization analysis demonstrates, size isn't everything, and neither is rank.

For more detail, more tables and more top 10 rankings, please visit [www.natureindex.com](http://www.natureindex.com).

**Catherine Armitage**  
*Chief editor, Nature Index*

### Global leaders

**S2:** The US reigns, but China is taking up ever more space, squeezing out European stalwarts.

### World of research

**S4:** While the Nature Index top 20 also dominate the subject rankings, outliers offer surprises.

### Top 100 table

**S5:** Institutions ranked by their Fractional Count in the Nature Index.



### ON THE COVER

The Nature Index 2019 Annual Tables reveal the dominant institutions in natural sciences research, according to their output in leading journals.

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**CORRECTION**

In the Nature Index 2019 Annual Tables (*Nature* **570**, S1–S6; 2019) the fractional counts, percentage changes and article counts used for the tables were incorrect, which affected the rankings of some institutions. The updated data, graphics and rankings can be found online at <https://www.nature.com/collections/fbfjafhcb>.