

Size is not everything according to latest Nature Index annual tables

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nature INDEX 2019 ANNUAL TABLES

natureindex.com

LEAGUE OF LEADERS

Ranked by subject

GLOBAL VIEW

The country contest

TOP 100

The institutions that
dominate research in the
natural sciences

Nature Index annual tables 2019. Credit: Springer Nature

In the Nature Index 2019 annual tables, released today, the United States is well ahead of China then Germany to make up the top three in the country ranking, while the top three institutions—the Chinese Academy of Sciences, Harvard University and Max Planck Society—have held fast to their positions in the institutional ranks. For the first time, the Nature Index annual tables also include a normalized ranking. This takes into account the number of high-quality articles published as a proportion of an institute's overall output in the natural sciences. The normalized ranking reveals a very different set of leaders among academic institutions.

The top 100 Nature Index ranking draws on metrics known as the Article Count (AC) and Fractional Count (FC), which measure the number of articles and the contribution an [institution](#) makes to an article, respectively. In contrast, the new normalized ranking is derived by considering the ratio of FC to the institution's total article output in [natural](#) sciences as tracked by the Dimensions database of Digital Science. The normalization calculation allows institutions of different size to be compared on the same basis. The AC and FC are based on about 60,000 articles published during 2018 in the 82 prestigious scientific journals included in the Nature Index, while the counts of articles in [natural sciences](#) in Dimensions are drawn from 3.88 million articles tracked in 2018.

The top three institutes in the normalized ranking are: Cold Spring Harbor Laboratory in the US, the Institute of Science and Technology Austria, and the Weizmann Institute of Science in Israel. Interestingly, the normalized approach sees some renowned research institutes slip down the rankings slightly in comparison to their position in the standard

ranking tables.

David Swinbanks, Founder of the Nature Index, said: "The inclusion this year of a normalized ranking alongside the standard Nature Index annual tables is especially interesting because the ranking draws to light some smaller institutes that are proportionally outstripping research powerhouses and would otherwise remain buried much lower down in the standard rankings. The smallest institutions in the top ten have some common features: ambition, as disclosed by mission statements about striving to be the best in the world, interdisciplinarity, with the strong embrace of collaboration across fields, and in several cases, the backing of Nobel laureates."

To coincide with the release of this year's Nature Index annual tables, *Nature* will publish a special supplement in the 20 June issue that includes data visualizations of the top twenty global institutions, the top ten institutions in each Nature Index subject area, and the top countries and regions by FC. On nature.com, top ten listicles will cover seven categories, including the life sciences, chemistry, physical sciences, earth and environmental sciences and the normalized top ten. Further category listicles will be published subsequently on [natureindex.com](https://www.natureindex.com/), for example highlighting the top ten government, corporate and healthcare institutions.

More information: www.natureindex.com/

Provided by Springer

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