

## Clarivate Identifies Global Scientific Pioneers with Annual Highly Cited Researchers List

USA dominates influential list of researchers recognized by their peers, but global landscape shifts as Chinese researchers capture a 12% share

LONDON, Nov. 18, 2020 /PRNewswire/ -- Clarivate Plc (NYSE:CCC), a global leader in providing trusted information and insights to accelerate the pace of innovation, unveiled its list of <u>Highly Cited Researchers</u>™ 2020 today. The highly anticipated annual list identifies researchers who demonstrated significant influence in their chosen field or fields through the publication of multiple highly cited papers during the last decade. Their names are drawn from the publications that rank in the top 1% by citations for field and publication year in the Web of Science™ citation index.



The methodology that determines the "who's who" of influential researchers draws on the data and analysis performed by bibliometric experts and data scientists at the Institute for Scientific Information™ at Clarivate. It also uses the tallies to identify the countries and research institutions where these scientific elite are based.

The key findings for 2020 show:

- 6,167 researchers from more than 60 countries and regions have been recognized this year.
- Whilst the United States continues to dominate the list as the home to the highest number of Highly Cited Researchers, with 2,650 authors, representing 41.5% of the researchers on the list, its relative share of the list continues to decrease (44% in 2019).
- Harvard University, home to 188 researchers is once again the institution with the highest concentration
  of Highly Cited Researchers in the world. Its neighbors the Broad Institute and Massachusetts Institute
  of Technology join them towards the head of the list of leading global institutions homes to 61 and
  53 Highly Cited Researchers respectively.
- Mainland China's place on the list continues to surge it is now the home to 770 (12.1% or 1:8) researchers on our list up from 636 or 10.2% in 2019. Its rank has been boosted by the remarkable entry into the top ten of Tsinghua University, Beijing, moving up 10 places from 19th to 9th on the list together with the arrival in 2020 of Peking and Zhejiang Universities into the upper echelons of the list.
- Singapore shows strongly, represented by Nanyang Technological University and National University of Singapore.
- Europe also has its fair share of good news. The numbers of Highly Cited Researchers based in Germany and the Netherlands have risen this year both showed a drop last year. The Max Planck Society in Germany remains at number 5 on the list of institutions whilst Utrecht University (27 researchers) and Wageningen University & Research (24 researchers) in the Netherlands both moved up to the top tier of universities listed. The Swiss Institute of Bioinformatics flew 20 places up the institutional rank with the addition of a dozen Highly Cited Researchers this year.
- This year's list includes 26 Nobel laureates, including three announced this year:
  - Emmanuelle Charpentier, Max Planck Unit for the Science of Pathogens, Berlin, Germany (Chemistry);
  - Jennifer A. Doudna, University of California, Berkeley, United States (Chemistry); and,
  - Reinhard Genzel, Max Planck Institute for Extraterrestrial Physics,
     Garching, Germany and University of California, Berkeley, United States (Physics).

- Also included are 66 Citation Laureates™: individuals recognized by Clarivate, through citation analysis, as 'of Nobel class' and potential Nobel Prize recipients.
- A total of 3,896 researchers are celebrated for their performance in the 21 Essential Science Indicator™ (ESI) fields, and 2,493 for cross-field performance, for a total of 6,167 unique researchers as some truly extraordinary Highly Cited Researchers appear in more than one ESI category.
- Of the researchers named as Highly Cited in the 21 ESI fields, nine researchers showed exceptional broad performance, recognized for being highly cited in three or more categories. They are a truly global group – in North America, Europe, Asia and the Middle East.
- Australian research institutes continue to punch above their weight. In a country of just 25 million, the
  number of researchers recognized in 2020 is 305. Australian research institutions appear to have
  recruited a significant number of Highly Cited Researchers in recent years while also increasing their
  number of homegrown talent.

David Pendlebury, Senior Citation Analyst at the Institute for Scientific Information, said: "In the race for knowledge, it is human capital that is fundamental and this list identifies and celebrates exceptional individual researchers who are having a great impact on the research community as measured by the rate at which their work is being cited by others."

Figure 1: Highly Cited Researchers by country or region

Rank	Nation	Number of Highly Cited Researchers	Percent of Highly Cited Researchers
1	United States	2650	41.5
2	Mainland China	770	12.1
3	United Kingdom	514	8.0
4	Germany	345	5.4
5	Australia	305	4.8
6	Canada	195	3.1
7	The Netherlands	181	2.8
8	France	160	2.5
9	Switzerland	154	2.4
10	Spain	103	1.6

Figure 2: Highly Cited Researchers by research institution or organization

Institution	Nation	No. of Highly Cited Researchers
Harvard University	USA	188
Chinese Academy of Sciences	Mainland China	124
3. Stanford University	USA	106
National Institutes of Health	USA	103
5. Max Planck Society	Germany	70
University of California Berkeley	USA	62

7. Broad Institute	USA	61
University of California San Diego	USA	56
9. Tsinghua University	Mainland China	55
10. Washington University of St Louis	USA	54

Joel Haspel, SVP Strategy, Science at Clarivate: "Our analysis shows that the primary contribution to global scientific papers and advancement is being driven by the US and China. The story this year is about both countries' research success. The USA remains the scientific powerhouse of the world. China's progressive stance towards research and development over the past two decades has delivered highly cited, high-impact papers, increased international collaboration and translated its research into valuable intellectual property and innovation.

"As Chinese researchers have been encouraged to productively engage with the global research community, the US has been the primary destination for international students seeking advanced degrees as Chinese students form the largest number of international students in the US. Their success and futures are inter-twined."

The full 2020 Highly Cited Researchers list and executive summary can be found <a href="here">here</a>.