1. The aims of this readymade ranking

This readymade ranking aims to show how selected U-Multirank institutions are performing in terms of seven different bibliometric performance indicators in the areas of research and research linkages. While it is not possible to produce a definitive list of the world's "top performing" research universities, U-Multirank shows top performances in different aspects of research.

2. The selection of institutions to compare

It does not make sense to include institutions that are not research active, or those that have only a very limited research mission, in an international comparison of research performance. In this comparison the U-Multirank team has opted to compare PhD awarding institutions as this is an uncomplicated method of identifying research active universities (the U-Multirank principle of comparing "like with like"). Applying this criterion gives us a group of 1269 institutions to compare. This group includes all research universities included in the CWTS Leiden Ranking 2016 (www.leidenranking.com), which are included in U-Multirank on the basis of bibliometric and patent data (more than 400 of these universities are full participants and submit additional non-bibliometric performance data to us).

3. The selection of indicators

In U-Multirank we have eight indicators in our research dimension, as well as indicators on joint publications with industrial, international and regional partners. For this comparison we have selected four research indicators and the three joint publication indicators: the four research indicators are citation rate, research publications (both in absolute numbers and size-normalised) and the proportion of publications that are amongst the top 10% most frequently cited. (Further information on these indicators can be found by clicking on the indicator titles in the ranking.) Our intention was to select indicators that measure research productivity/impact in different ways, as well indicators that concern research linkages - the extent to which a university is active in research co-operation with industry, internationally and in its region. The selection of only bibliometric indicators means that we have a full set of data on these seven indicators for all 1269 PhD awarding universities in U-Multirank.

Please note that the ranking is now sorted by citation rate but that you can change this by selecting a different indicator or sorting method.

4. Examples of interesting results

No university from the 1269 compared achieved "A" scores on all seven selected indicators, while only six achieved six "A" scores: two each from the Netherlands and the UK, and one each from France and Singapore. There are two main reasons for this particular outcome: smaller universities do not do well on the absolute number of publications, while most leading US research universities do not achieve "A" scores on one or more of the research linkage indicators, particularly international co-publications.

In terms of the top scores on each indicator, Rockefeller University leads in terms of citation rate, size-normalised publications and the proportion of top 10% cited publications; Harvard on absolute numbers of publications; North Carolina State University has the highest proportion of industry co-publications; University of Liechtenstein has the highest share of international joint publications (it is the only university in the country so all of its research collaboration is international); and the Moscow Institute of Physics and Technology the highest proportion of regional co-publications.