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To: *Times Higher Education*

Proposal concerning *Times Higher Education* World University Rankings

*Requests aimed at more appropriate application of
ranking indicators relating to research capabilities*

The decline in research capabilities at Japanese universities is becoming more severe, and Japan's relative presence as a producer of academic papers is falling in both qualitative and quantitative terms. In addition to ongoing reform efforts led by individual universities, appropriate responses at the national policy level are now more urgent than ever. These include utilizing specialist personnel such as university research administrators to improve the fundamental research environment and enhancing government subsidies for scientific research and other forms of research funding.

In implementing such policies, it is important to have evidence offering an objective and dispassionate view of universities' research capabilities. Needless to say, assessment of universities' research capabilities requires a combination of indicators rather than just one single indicator.

Against this backdrop, the placings of Japanese universities in the *Times Higher Education* (THE) World University Rankings continue to fall year after year. Of course, pinning all one's hopes on university rankings would be mistaking the means for the end, but rankings should not be regarded simply as short-term, temporary results. We believe that universities need to proactively utilize such rankings in their own efforts to enhance medium- to long-term research capabilities and reform themselves.

At the same time, as many Japanese universities and government agencies have already grasped, indicators evaluating universities' research capabilities, especially the citation indicator, have a decisive impact on university rankings. As you know, however, one-sided views of university research capabilities based on limited indicators cause some unease and attract a certain amount of criticism. There are fears that erroneous application of limited factors such as the citation indicator could lead to erroneous evaluations that do not reflect the actual state of each university's reinforcement of research capabilities.

In order to further develop academic research at research universities, the Research University Consortium of Japan has disseminated information including various proposals. Four years ago our precursor, the Research University Network of Japan, submitted requests to THE World University Rankings regarding improvements to ranking indicators. Although this prompted improvements to aspects including counting methods for “kilo-author” papers, unfortunately other requests, including those concerning the vital citation indicator, were not addressed. Given this, we have decided to renew our requests to THE World University Rankings in the aim of achieving more appropriate application of ranking indicators relating to research capabilities. Our requests focus on developing a common awareness of the dangers inherent in one-sided views of university research capabilities and ensuring dispassionate and appropriate application of such indicators. From a global perspective, we sincerely request that you share with us diverse ideas regarding research universities and make an appropriate response to the points raised.

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Details of Proposal

(1) Ongoing communication with Japanese research universities

Information exchange with Japanese research universities has ceased since our last request was submitted four years ago. We believe that it is important to maintain ongoing two-way communication with THE and hope that this request will provide impetus to create forums for dialogue and build trust.

(2) The research and citation indicators

(a) The citation indicator

At present, the citation indicator overemphasizes the standardized Field Weighted Citation Impact (FWCI). FWCI is used as the citation indicator, and field-adjusted and country-adjusted average citations are used in evaluation indicators. We agree that FWCI is an excellent indicator for this purpose that should be continuously used in the future. However, with this methodology a university's overall FWCI can be skewed by a very small number of papers that temporarily attract an extreme flurry of citations. FWCI alone cannot be said to enable an accurate grasp of the research capabilities of a university with diverse research strengths. We request that THE should use a combination of several indicators with FWCI rather than relying solely on FWCI.

For example, it would be possible to use the types of indicators outlined below as citation indicators beyond FWCI.

- (a)-1 Field-adjusted citations divided by researcher numbers could be used to evaluate citations, rather than just the average FWCI. We believe it would be more appropriate to use FWCI combined with the total number of field-adjusted citations (e.g., the accumulated FWCI of individual papers) divided by researcher numbers (converted into FTEs). This “citation/researcher numbers” methodology could be expected to enable scale-based adjustments for universities with diverse characteristics.
- (a)-2 Rather than evaluating only standardized citation indicators like FWCI, methodologies should also evaluate research capabilities in terms of substantiality—or, *Atsumi (in Japanese)*—i.e., a certain level of quality at or above a certain volume. Using substantiality as an

evaluation indicator, a university's capability to produce a given level of outstanding papers at or above a certain volume—for example, number of top 10% papers—would also become an indicator of research capabilities at global universities. An indicator that counts number of top 10% papers divided by the number of researchers should also be introduced.

(b) Fractional counting of papers

We welcome THE's review of the handling of "kilo-author" papers carrying the names of a thousand or more authors. However, there is also a need for appropriate evaluation of papers with hundreds of authors presented under the auspices of internationally important research projects such as those promoting joint use and joint research, especially relating to large devices. In order to appropriately evaluate multi-author papers, we request that for all papers, number of papers and citations should be fractionally counted by number of authors or number of institutions to which authors are affiliated.

(3) Further considerations

(c) Faculty count in indicators

Universities' own declarations are used for the faculty count, which is the denominator for indicators, etc., but there is no international consistency in counting methods, and this disparity could cause problematic variations in score. Faculty count should be ascertained objectively, based on common global standards. Japanese universities will reaffirm calculation methods and request rigorous application of such methods by THE. In the future, faculty counts will need to be ascertained using an objective third-party database.

(d) Handling of papers published in non-English-language journals

Papers published in non-English-language journals, such as those written in the native languages of their respective countries, target a limited audience and tend not to be cited globally. Moreover, the characteristics of each language make it difficult to adjust for such papers. Given these realities, it is not necessarily appropriate to compare research capabilities on equal terms with English-language papers. For these reasons, we request that when analyzing citations, papers published in non-English-language journals should be excluded from totals, even if they are listed in databases.

(e) Ranking disclosure methods

Since World University Ranking results help universities to enhance their research capabilities and improve their research environments, we request that THE expands the scope of information available free of charge to include not only the pillars, but also each university's scores for the 13 indicators and real values prior to their conversion into scores for one's own university. Japanese research universities collaborate in compilation of THE World University Rankings without compensation, and we would like to receive feedback from THE that will help us to strengthen our research capabilities.

We would also like results to include not only rankings, but also an indication of the percentile achieved among all universities ranked. Doing this would enable universities to ascertain their relative position even if the number of universities ranked increases.