# **Tokyo Statement**

# The Need for Long and Substantial Investment in Frontier Research at Research Intensive Universities (RIUs)

## **Announced by**

AAU, AEARU, C9+HK3, German U15, GO8, LERU, RU11 Japan, Russell Group and the U15 Canada

















#### General

A definite mission of a university is to provide ideas that can lead to solutions for a sustainable society by creating and fostering universal values, built on natural, social sciences and humanities research, and by education. Society as a whole faces a diversity of complex challenges. Aging, global warming, and terrorism are but a few. Research intensive universities (RIUs) [1] are at the core of meeting these challenges. For that very reason, RIUs worldwide argue that long term and substantial investment in frontier research is critical to meet the needs of our global society.

#### Investment

Investment in RIUs is essential. Powerful social impact ranging from advances in medical diagnostics and therapeutics that improve the quality of life, to innovation and the development of new technologies, has been a clear consequence of investment in research. It is essential to future competitiveness. Research at RIUs worldwide is the foundation that will allow next generations to flourish.

However, innovation itself is a complex process, as it is not characterized by a linear progression of basic science into new products. It is rare that the new knowledge created by scientific breakthrough has immediate practical implications. Indeed major developments are often accidental. Frontier research requires patience, persistence and investment. To enhance impact for society, research collaborations in science and technology with social sciences and humanities, often play an important role in creating new values, mediating conflicts, and solving the challenges we face. Therefore, investment in comprehensive RIUs is crucial to the sustainability of society.

### **Global Economic Contribution**

RIUs' contribution to the global economy, as a result of their broad set of activities in general and their research and innovation in particular, cannot be underestimated. It is a fact that RIUs generate millions of jobs and represent an enormous gross value added (GVA) [2] to the global economy.

Furthermore, RIUs contribute to the overall character and vibrancy of the cities and regions in which they are located, by attracting students, researchers, and tourists to the area and by facilitating social mobility. RIUs worldwide also have a crucial overarching role as drivers of long term sustainable economic growth, through their commercialization activities based on research, such as spin-out companies and intellectual property licensing. The true contribution of RIUs is in fact much larger than figures indicate and should not be underestimated.

## **Innovation Ecosystems**

RIUs make innovation ecosystems thrive in a transnational world. The university is the unique system which has existed long before nation-states or modern enterprises were even established. It has proven to be a highly successful system.

RIUs especially play a unique role in advanced economies by pushing the boundaries of academic discovery to industry, by increasing the pool of knowledge available to society, and by providing high quality graduates for the global labor/professional market. They can provide a hub for discussion and create connections between academics and industries, students and companies, public and private, and domestic and international sectors. They therefore make the regions where they are located attractive places to invest in. RIUs' role in conserving the ecosystem is significant for ensuring the sustainable development of the global society.

#### Conclusion

World-class RIUs can contribute in a significant way to the generation of knowledge for future sustainability. RIUs comprise essential resources like outstanding human resources, a unique environment including facilities and systems, curiosity-driven research activities, and accumulated knowledge. These resources are essential for frontier research and the development of a global economy. Thus, RIUs create a transnational ecosystem that contributes to the sustainable development of the global society.

Consequently, world-class RIUs together call upon their governments for a continued support of education and the full cost of their research activities. The investments should cover a wide spectrum of research, across all disciplines. This financial support is not merely a cost; on the contrary, it is an investment, indispensable and most valuable, for the future of the RIUs and the societies in which they are located.

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Notes

[1] RU11 Japan, LERU, AAU, C9/HK 3, Go8, Russell Group, German U15, U15 Canada, AEARU

[2] Definition GVA: Gross value added (GVA) measures the contribution to an economy of an individual producer, industry, sector or region. It is used in the calculation of gross domestic product (GDP). GDP is commonly estimated using one of three theoretical approaches: production, income or expenditure. When using production or income approaches, the contribution to an economy of a particular industry or sector is measured using GVA. (Financial Times Lexicon)

http://lexicon.ft.com/Term?term=gross%20value%20added%20GVA

[3] Reference to the LERU BiGGAR study

In Europe alone, the estimation is that the entire RIUs sector contributes over 300 billion Euro of GVA with 3.8 million jobs created.