



Case study | The Japan Science and Technology Agency

# Using Research Fronts to inform science policy and guide national funding decisions



### Customer

The Japan Science and Technology Agency (JST), a funding entity that plays a central role in Japan's Science and Technology Basic Plan



### Challenge

Need to ensure that their research investments are in line with current and future research needs amid the challenges posed by ever-evolving frontiers of the global scientific knowledge base



# Solution

Research Fronts Navigator, a custom research analytics platform



## **Outcome**

JST chose Research Fronts Navigator to identify frontier research areas for funding under the ministry's strategy for science, technology, and innovation (STI), as well as to conduct various analyses including international benchmarking, portfolio analysis on Japan, and identification of key scientists.

"The combination of Web of Science data, consultation and the online solution has enabled JST to provide funding evidence for policy makers and practitioners on the future key areas to promote science and technology innovation."

Manager, Evidence analysis team of JST



Scientific knowledge is expanding exponentially around the globe. This poses a challenge for governments as they seek to optimize allocation of funding for basic research, technological R&D, dissemination of scientific information and international collaboration. With the mission of informing Japan's national science and technology plan, the Japan Science and Technology Agency (JST) needs to identify and act consistently with clear and compelling insights into where to allocate scarce resources.

Seeking insights and data-driven evidence, JST partnered with Clarivate on a project to map out the agency's future resource portfolio based on data and analytics from Clarivate's Research Fronts, a nexus of frequently cocited Highly Cited Papers identified through Clarivate's Essential Science Indicators™. The resulting Research Fronts Navigator platform delivered innovative and relevant research indicators while allowing users to filter and sort results by key data fields. Article-level information was provided to identify the research teams and institutions involved in each emerging research area.

The solution designed for JST helped identify consequential areas of activity at the cutting edge of scientific discovery, along with the teams and institutions working in these hot spots. Research Fronts analysis has enabled JST to make evidence-based funding decisions for their organization and recommendations to other policy makers regarding future research areas to promote science and technology innovation.

The tool has also enabled the ministry policy makers to engage over 2,000 stakeholders from the research community to provide feedback on which areas are most important for future investment to accelerate innovation.