

Science and technology research policy in non-contact era

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Changes triggered by COVID-19 have had significant impacts to an unprecedented degree on various areas including economy, society, science and technology policies. Under the circumstances, UN has set up UN COVID-19 Recovery Framework and Sustainable Development Goals(SDGs) policies for the safety and sustainability of humankind and international society. The NRF, Korea's representative funding agency, has readily joined UN activities with all efforts to make meaningful contribution for fighting against COVID-19 and it also gladly accepted cooperation with GLoPID-R, which is an international network of main funding agencies in the world.

The most important change we have seen during the COVID-19 outbreak is the advent of non-face-to-face, non-contact era, which has accelerated transition toward the digital era. During this digital age, artificial intelligence (AI), its core technology, has been combined with 5G, the internet of Things (IoT) and big data to improve productivity and facilitate interactions between people and objects, and between things themselves.

The Korean Government has recognized the sudden technological changes and consequences during non-contact era and quickly responded, by making lots of investment in the fields such as Bio, Information, Environment/Energy, and Nano (BIEN), as well as Space. Accordingly, Ministry of Science and ICT appointed 25 future emerging technologies such as digital medicine development technology and AI Big data customized learning technology. In addition, the KISTEP selected 10 emerging technologies such as Unmanned Mobile Delivery. As part of cooperative efforts, the NRF has made the science and technology research policies to support the emerging technologies for digital non-contact era. The NRF also established new organizations, Directorate for Digital Innovation and Data-driven Center, and it newly introduced online paper review system.

The emergence of non-contact era has led to the breakdown of boundaries among all academic areas and technology convergence. To successfully cope with such drastic changes, coming up with creative and transformative science and technology R&D policies is a must. Indeed, strong support for and development of cutting-edge science and technologies are prerequisite for global sustainable development, making a nation become a global leader in science and technology.