

NATIONAL RESEARCH FOUNDATION
PRIME MINISTER'S OFFICE
SINGAPORE

ADDENDUM TO THE PRESIDENT'S ADDRESS

1 The National Research Foundation (NRF) seeks to harness science and technology (S&T) to create new opportunities for economic growth in a post-COVID-19 world, and support Singapore's national and societal needs.

Supporting the Fight against COVID-19

2 S&T has played a critical role in Singapore's fight against COVID-19. Singapore was the third country in the world, outside of China, to successfully culture the virus. Public research and development (R&D) institutes, such as the Agency for Science, Technology and Research, worked closely with the public health community in Singapore to develop accurate diagnostic test kits and effective treatment methods. Today, the research, innovation and enterprise (RIE) community continues to work on more than 200 research projects that not only support Singapore's current fight against COVID-19, but also strengthen Singapore's preparedness for future pandemics.

3 Our RIE efforts will remain key in enabling Singapore to meet future national challenges, and to create new opportunities for economic growth in a post-COVID-19 world. Through our RIE plan for the next 5 years, NRF will support basic and applied research in high impact strategic areas, building on our S&T strengths in advanced manufacturing and engineering, health and biomedical sciences, sustainability and urban solutions, as well as digital technologies.

Supporting Economic Transformation

4 Our RIE efforts are closely integrated with the work of the Future Economy Council to support economic transformation and create more good jobs for Singaporeans. We will scale up innovation platforms to drive S&T adoption across industry, and enhance the translation of research outcomes into globally-competitive and marketable S&T solutions that will derive greater value for Singapore and the world. For example, the National Additive Manufacturing Innovation Cluster has catalysed the deployment of innovative additive manufacturing solutions, ranging from the world's first 3D printing facility for port operations at PSA (with homegrown firm 3D Metal Forge), to 3D-printed nasal swabs to support COVID-19 testing. We will set up more of such platforms to meet emerging industry needs and better equip existing centres of innovation to support our enterprises to adopt new technologies. We will continue to support the growth of more innovative Singapore-based companies and strengthen research-industry linkages through initiatives such as technology consortia and corporate laboratories, and strengthen access to talent, partners and markets.

5 In a post-COVID-19 world, we will also support industries to harness our S&T strengths more effectively to create new avenues of enterprise growth. For example, we initiated the Maritime Transformation Programme and the Aviation Transformation

Programme to further Singapore's position as a maritime and aviation hub. These initiatives leverage technologies such as big-data analytics and advanced sensors and communications to enhance our connectivity capabilities, and will enable Singapore to remain a critical transport and logistics node in a post-COVID-19 world where resilience and reliability will be more valued. As the pace of digitalisation continues to accelerate across the economy and society, we will also build on our investments in digital and automation technologies including artificial intelligence and robotics, which are critical enablers in Singapore's journey as a Smart Nation.

6 In addition, we will continue to encourage more young Singaporeans to pursue good jobs and careers built around S&T. NRF will support the SGUnited Traineeship Programme, and offer traineeships in our R&D laboratories, deep-tech start-ups, accelerators and incubators. These experiences will be part of a broader effort to grow the RIE talent pool and strengthen people linkages within the RIE ecosystem.

Addressing our National Needs

7 Beyond Singapore's economic transformation, our RIE plan will continue to support national needs and improve the lives of Singaporeans. For example, we will partner the Ministry of Health to build on our R&D strengths in areas such as preventive care and digital healthcare to transform our healthcare system and deliver quality services at sustainable costs, and enable Singaporeans to lead healthy and productive lives. We will also harness S&T to build on our capabilities in sustainable urban solutions and low-carbon technologies. This will contribute to our national efforts to address climate change, and enhance the quality of living in Singapore.

8 As technology continues to accelerate the pace of change across society, we must continue to grow new S&T capabilities to meet future needs. NRF will continue to invest in building a robust base of research scientists and engineers, with strong links to the global community. The proportion of research scientists and engineers in our population has grown at a compound annual rate of 3.5% over the last 20 years, and is now comparable to that of other small advanced economies. We will also refresh our strategic investments in major research centres across our universities and in the Agency for Science, Technology and Research, and build on our collaborations with international partners through our Campus for Research Excellence and Technology Enterprise. To further position Singapore as a global node of scientific excellence, we will build on our NRF Fellowships and Investigatorship schemes to attract both promising young scientists and established experts to pursue ground-breaking research in Singapore. At the same time, our Returning Singapore Scientist scheme attracts overseas Singaporean scientists and talents home, to grow a strong core of Singapore researchers who will eventually take on leadership positions and drive the pursuit of scientific excellence here.

Conclusion

9 Our RIE investments have created a strong foundation for Singapore to seize the new opportunities in a post-COVID-19 world and emerge stronger. Our RIE plan for the next five years will strengthen the partnership with industries and create new opportunities for Singapore. It will also ensure that Singapore remains resilient in the face of new challenges, beyond the current COVID-19 pandemic. We must continue to exploit new knowledge and S&T capabilities to diversify our economy, create new

industries, train our people and build capacity to meet Singapore's national needs. This will enable Singapore to remain competitive and relevant to the world, as a vibrant Global-Asia node of technology, innovation and enterprise.

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