Speech by Mr Heng Swee Keat

Chairman of the National Research Foundation

At the Global Young Scientists Summit (GYSS) 2026 Opening Ceremony

06 January 2026

Her Royal Highness Princess Maha Chakri Sirindhorn,

Professor Low Teck Seng, Chairman of the Global Young Scientists Summit,

Distinguished speakers,

Young researchers, guests,

Ladies and gentlemen,

Opening

1. Good morning, and a warm welcome to the 14th edition of the Global Young Scientists Summit or GYSS!

    a. This year's GYSS features the largest and most diverse group of participants, with more than 400 talented young researchers from 57 countries, including participants from Columbia, Kazakhstan, Mexico and South Africa, who are here for the first time. A warm welcome to everyone!

    b. The National Research Foundation is honoured to have a record number of 21 distinguished speakers at GYSS this year. They represent some of the best scientific minds of our time - Nobel Laureates, Turing Prize winners, Millenium Technology Prize recipients and other eminent awards. We are very happy to have four female leaders in science – the highest number so far.

    c. The diversity of talent that are gathered here augurs well for the progress of science. Indeed, science should be global, and we look forward to the exciting exchanges. I thank Professor Low Teck Seng and his GYSS organising team, and the many colleagues who have worked hard to keep improving this Summit.

    d. Let me also express our deep appreciation to Her Royal Highness Princess Sirindhorn, who has been gracing us with her presence since the inception of GYSS.

Reflections on Science and Progress

2. As we are at the start of 2026, allow me to share three key trends that will likely shape science in the future.

    a. First, we are in the midst of a revolution in AI and machine learning capabilities. As a general-purpose technology, these developments will transform many facets of our lives and our economy, from how we interact with each other, to all economic sectors from agriculture to healthcare to finance and manufacturing.

    AI will also be changing research and innovation in very fundamental ways. For scientists, especially those who are early in their careers, this is a truly exciting time. You will have techniques and tools of immense sophistication that can be applied to increasingly complex and difficult scientific problems. At the same time, these developments also raise concerns about ethics, accountability, and misuse. Scientists and innovators must work with policy makers all over the world to develop and apply AI systems ethically and responsibly.

    b. Second, quantum computing is advancing swiftly and is on the brink of solving what is once-unsolvable computational problems —from simulating complex biological systems to optimising supply chains. Yet, much work remains to be done to build scalable, reliable fault-tolerant quantum systems.

    I look forward to hearing more about these developments in Thursday's panel on "Supercomputing and Quantum: Redefining the Future".

    c. Third, interdisciplinary research will be even more important. The challenges facing humanity are increasingly complex and require expertise from multiple fields. Climate change, for example, requires a combination of environmental science, engineering, data science, and policy analysis.

    At the NRF, we are committed to fostering such interdisciplinary collaboration, knowing that the solutions to our greatest challenges will come from these intersections of scientific and other fields of knowledge.

Singapore's Achievements in RIE

3. 2026 is an important year for science and innovation in Singapore, as we start implementing RIE2030 – our next five-year plan to drive research, innovation and enterprise. For RIE2030, the Government has allocated S$37 billion, maintaining the Government’s long-term commitment to providing roughly 1% of GDP for Research, Innovation and Enterprise, or RIE, activities.

4. This long-term commitment has enabled Singapore's RIE ecosystem to make strong progress. We have built significant basic research strengths and talent across a broad range of areas. Our research talent and capabilities have in turn significantly contributed to our economy and national strategic priorities.

    a. For example, Business Expenditure on R&D has increased from $4.2 billion in 2012 to $8.1 billion in 2022.

    b. Our tech startup ecosystem has continued to grow with venture capital investments reached US$6.1 billion in 2023, up from US$4.1 billion in 2020.

    c. The societal impact of our RIE programmes has also been substantial. Our National Precision Medicine Programme exemplifies this, combining genomics, data science, and clinical research to develop more targeted and effective treatments tailored to the genetic makeup of our diverse population.

    d. Similarly, our innovations in floating solar photovoltaics and in integrated photovoltaics are allowing us to optimise solar energy generation despite our limited land size.

Singapore's Vision for RIE 2030

5. Let me now share a few key highlights of Singapore's RIE2030 plan. RIE 2030 will
    a. Use R&D to achieve consequential outcomes in key economic and national priorities.
    b. Build capabilities in AI, data and compute to enable cutting edge research and innovation
    c. Strengthen our talent pool and basic research capabilities.

6. In RIE2030, we will launch two major initiatives, namely, RIE Flagships and RIE Grand Challenges.

    a. RIE Flagships will seek to transform selected economic sectors, while RIE Grand Challenges will develop research-based approaches and solutions for pressing national strategic priorities.

    b. For both RIE Flagships and Grand Challenges, we are taking a systematic approach to define desired economic and strategic outcomes, identify major bottlenecks where R&D is needed, and develop coordinated portfolios of research and innovation programmes to realise the targeted goals.

7. At the same time, NRF will continue to invest heavily to keep our basic research talent and expertise at the cutting edge. This recognises the long-term and often

unpredictable nature of research, and the critical role that breakthrough research plays in developing paradigm-shifting innovations.

8. In parallel, NRF will develop well-coordinated capabilities and infrastructure in artificial intelligence, data and advanced compute, to enable leading edge research and innovation.

9. Beyond these, in RIE2030, the NRF will implement a long-term funding plan to maintain and upgrade our essential research infrastructure, to ensure that our scientists have access to the advanced tools and facilities that they need for globally competitive research.

10. Excellence in research is ultimately about developing and bringing together the best talents from Singapore and around the world to work on the most critical challenges.

    a. As Professor Aaron Ciechanover said at a GYSS conference earlier, science is global. It is critical that we do not fragment the different streams of pursuits across the world.

    b. Instead, we should seek to gather the best minds together to address humanity's common challenges.

    c. Competition and Cooperation both have their place – we should compete to build distinctive peaks of excellence, and cooperate to solve common challenges, so as to take better care for lives on earth and our fragile planet.

11. As part of this belief, I would like to particularly highlight two areas:

    a. first, NRF will further strengthen our portfolio of research grants, fellowships, and investigator-ships to nurture both leading and promising local researchers, attract top-tier and emergent research talent from around the world.

    b. second, we will also continue to build new links and deepen existing links among researchers in Singapore and the global scientific community. We have built effective research partnerships around the world and hope to continue to expand these.

Hopes for GYSS 2026

12. Let me now turn now to what I hope that you, our young scientists, can benefit through your participation in this Summit.

13. First, I hope GYSS 2026 will inspire you to think boldly about the impact you want to make. Each of our 21 eminent laureates has a remarkable story of imagination and creativity, determination and persistence, collaboration and individual effort.

    a. Each of their journeys remind us how established scientific dogma is overturned, and critical new fields of knowledge are created.

    b. As you engage with these remarkable minds over the coming days, ask not just "how" they achieved their breakthroughs, but "why" they chose the problems they worked on, and how this has created lasting impact.

14. Second, I hope this Summit will help you forge new friendships and networks that transcend traditional boundaries.

    a. You come from 57 countries, including Singapore, and from very diverse scientific disciplines.

    b. Beyond the very exciting GYSS programme, I encourage you to also take the opportunity to explore the laboratories and innovation centres in Singapore that have put together a rich programme of visits.

    c. And take the opportunity to make new friends. The friendships and networks that you form during GYSS and through such visits will stand you in good stead as you seek to address complex challenges that will require global, multidisciplinary collaboration.

    d. And of course, look around Singapore!

Closing

15. In closing, let me:

    a. Once again, express our deep appreciation to our 21 laureates for their generosity in sharing their time and wisdom at this Summit.

    b. to our young researchers who are willing to push the boundaries of science, you are the lifeblood of research and innovation ecosystems. May the Global Young Scientists Summit inspire and excite you, help you further

broaden your networks, and realise your potential to make high impact contributions.

c. We look forward to the opening plenary by Professor David Baker, the 2024 Nobel Prize Winner in Chemistry. His ground-breaking work in protein folding has profound implications for healthcare.

d. His insights, together with those of all our speakers will no doubt inspire us to think more boldly about the sciences and their application to humanity's many challenges.

I wish you all an exciting, inspiring and productive GYSS 2026, and to the launch of many new, transformational research and innovation initiatives.

Thank you.