

SPEECH BY DR TONY TAN KENG YAM, PRESIDENT OF THE REPUBLIC OF SINGAPORE, AT THE CLOSING CEREMONY OF THE GLOBAL YOUNG SCIENTISTS SUMMIT@ONE-NORTH 2015 HELD ON FRIDAY, 23 JANUARY 2015 AT 4.00PM AT NANYANG AUDITORIUM, NANYANG TECHNOLOGICAL UNIVERSITY

Eminent Speakers and Young Scientists

Distinguished Guests

Ladies and Gentlemen

Good afternoon.

It gives me great pleasure to join you at the close of the Global Young Scientists Summit@one-north (GYSS) 2015.

Research, Innovation and Enterprise

Singapore celebrates our 50th year of independence this year.

GYSS 2015 is part of a year-long series of activities under SG50, which is a nationwide effort to celebrate our country's 50th birthday.

GYSS provides a most appropriate platform for us to reflect on how Science and Technology has and will continue to contribute to Singapore's progress and development.

Singapore is a small island country with no natural resources.

We have therefore focussed our efforts on developing our only resource - our people.

Our investments in education have provided Singaporeans with the skills, including engineering capabilities and technical know-how, to support Singapore's economic development as we

progressed from a labour-intensive economy in the 1960s to a capital- and skill-intensive economy in the 1980s.

In the 1990s, we saw that technology and knowledge creation would be the key drivers of development and the first National Technology Plan was launched in 1991.

Since then Singapore has made substantial investments in Research and Development (R&D).

Annual R&D expenditure has increased ten-fold from \$0.76 billion in 1991 to \$7.2 billion in 2012.

Singapore's investments in R&D, which are carefully planned over 5-year cycles, have enabled us to build capabilities to address societal challenges and to develop new high-tech industries in sectors such as biomedical sciences, environmental and water technologies, and interactive and digital media.

Our investments over the years have created a vibrant R&D ecosystem in Singapore comprising a spectrum of industry-oriented research institutes and leading edge Research Centres of Excellence in our universities.

Industry partners such as Rolls Royce and the Lloyd's Register Global Technology Centre are also building corporate laboratories in collaboration with our universities to develop their next generation of products in Singapore.

Research, Innovation and Enterprise (RIE) will continue to play important roles in Singapore's transition to a knowledge-driven economy.

The next 5-year plan under RIE 2020 will focus our investments in key areas where Singapore has a competitive advantage and a strategic need and where we can best leverage R&D to support Singapore's future economic growth and build a resilient nation.

Building on the R&D ecosystem that has been established over the years, specialist expertise would be further deepened and strengthened in the priority areas to be identified.

The details of RIE 2020 are still being fleshed out, but I have no doubt that it will position Singapore to continue reaping the benefits of our investments in R&D for years to come.

Singapore Challenge 2015

Singapore also sees itself playing a role in the scientific search for solutions to problems affecting us on a global scale.

The Singapore Challenge, an integral part of the GYSS program, is part of our efforts to nurture future science and technology leaders, and promote science and technology development for the betterment of society.

The theme-based Singapore Challenge provides a platform for young researchers to translate concepts and ideas to products, working in concert with our local agencies.

Past Singapore Challenge winners like Dr Lynette Cheah of SUTD, as well as Dr Yossi Kabessa of Hebrew University, who are here with us today, are continuing their discussions with our local research community and agencies to bring their ideas forward.

The theme for this year's Singapore Challenge "*Ageing-in-Place*" is timely. Ageing is a global phenomenon affecting all nations.

As a country with one of the fastest ageing populations in the world, Singapore must be involved in the search for solutions to address the challenges related to Ageing.

We have received very exciting submissions to the Singapore Challenge and I congratulate Dr Luca Giancardo for winning the award this year.

I am informed that the Ministry of Health in Singapore is keen to follow up to explore opportunities for proof-of-concept and potential test-bedding of several ideas.

Engaging Singaporeans in Science and Technology

I am pleased to note that our distinguished speakers are also actively involved in engaging members of public during this period.

For example, the National Library Board hosted a very successful forum titled “*Inspiration and Perspiration: a scientific adventure in four acts*” where four GYSS speakers engaged with members of public.

Another example is the session hosted by the Singapore Management University on computer science involving all four Turing Award winners.

I would like to thank our distinguished speakers for partnering with our organisations and taking the time to share your experiences with the Singaporean community.

National Science Experiment

Along with these efforts to engage Singaporeans in science and technology, I am pleased to announce that Singapore will be conducting a National Science Experiment called “*Step Out for Science*”.

This is a national project jointly developed by the Ministry of Education, NRF, the Singapore University of Technology and Design (SUTD) and the Science Centre Singapore, which will involve more than 250,000 students at various levels to explore pervasive sensing and Big Data technologies in easy-to-grasp yet fascinating and challenging ways.

Through the National Science Experiment, our students will learn how science and technology can be used to provide information about their lifestyles in areas such as travel modes and time spent outdoors, to help them make informed choices with regard to their daily activities.

This will probably be the most extensive large-scale experiment we have had in Singapore.

The data collected through the National Science Experiment will also support Singapore's recently launched Smart Nation Initiative and research programmes such as "Land & Liveability National Innovation Challenge" and the "Virtual Singapore" project.

Commitment to GYSS

This year's GYSS is the third time that such an international gathering of science and technology leaders of today and tomorrow is being organised.

Over the years, the GYSS has gained traction and interest in the international community as evidenced by the increased number of nominating institutions, agencies, and laboratories, both locally and internationally.

The number of participants has grown from around 260, when we first started in 2013 to close to 300 this year.

We are also pleased that the number of distinguished speakers joining us at GYSS has also increased, from 15 in 2013 to 20 in 2015.

The GYSS aims to *Excite, Engage and Enable* its participants - both the young scientists as well as the distinguished speakers – from around the world.

Through the engagement that takes place across generations, disciplines and cultures, GYSS seeks to inspire young researchers and hopefully seed useful insights that would contribute to the next wave of scientific breakthroughs.

It is therefore a great pleasure for me to announce that the NRF has committed to organise the GYSS annually over the next five years.

We look forward to welcoming more young scientists and distinguished speakers in the years to come.

Conclusion

Ladies and Gentlemen, at 50 years old, Singapore is still young.

Like the participants of GYSS, we will continue to face many challenges ahead of us.

But I am confident that through the pursuit of knowledge and innovation and by staying open to new ideas, we can continue to create new opportunities for ourselves and the people we work with.

As we wrap up GYSS 2015, I hope that you will continue to maintain the friendships and networks built here and continue the exciting dialogue and exchanges beyond the GYSS 2015.

Finally, I would like to thank the eminent speakers for your contributions and hope to welcome you back to Singapore next year.

With this, I declare the GYSS@one-north 2015 closed.

Thank you.
