

Global Young Scientists Summit@one-north (GYSS@one-north) Singapore Challenge 2015

The Singapore Challenge is a unique feature of the GYSS@one-north. Participants of the GYSS@one-north are encouraged to submit white papers to address an identified national challenge. Selected research proposals will be presented to a panel comprising scientific leaders and captains of industry during the Summit. A cash prize and medallion are awarded to the best concept and technological solutions proposed to meet the challenge.

This year, the partner agency for the GYSS@one-north SG Challenge 2015 is the Ministry of Health (MOH).

Topic: **Ageing-in-Place**

Challenge Statement

How do we put in place new solutions to support a growing number of seniors to age in place – in their own homes and in the communities they are familiar with – for as long as possible, with dignity and grace, and to allow them to enjoy a good quality of life and to remain engaged members of their communities, even as diseases and frailty set in.

Description

The research whitepapers should be multi-disciplinary in nature, and cover a wide range of areas such as new models of health plus social care delivery that leverage latest scientific research and information technology/tele-health, new forms of enabled living, housing systems (i.e. architecture integrated with care services enabled by technology), or new forms of mobility systems that allow frail seniors to live independently in their own communities for as long as possible.

Phase I.

Participants accepted to participate in GYSS@one-north 2015 are encouraged to:

- Conceptualise a technical response to the challenge statement and description;
- Develop and submit a whitepaper;
- Work on a prototype or demonstration, if time permits.

Closing Date

The closing date for submissions is **Friday, 24 October 2014, 1700hrs (Singapore time)**. Participants can visit the website (www.gyss-one-north.sg) for more information on SG Challenge 2015.

Submission Requirements

The white paper and all accompanying materials must be submitted in English. The whitepaper, including the following information, should not exceed 2,000 words (Arial, font size 12, 1.5 line spacing). The word count does not include annexes.

- i. **Current Situation.** Describe briefly the current situation, the gaps and problems faced.
- ii. **Research Strategy.** Explain the proposed concept/solution, the corresponding research strategy and key objectives. Highlight the novelty/innovation(s) in the proposed concept/solution.
- iii. **Potential Impact and Benefits.** Explain the potential impact and benefits, i.e. economical, societal etc. of the proposed concept/solution to Singapore and the community in general.
- iv. **Participant's current and future research.** Detail participant's current and future research plans which may contribute to the development of the proposed concept/solution. Participants are encouraged to include full contact details, a CV and list of publications as annex.
- v. **Additional supporting documents/prototypes.** Images/videos should provide context and show the positive or intended results. Each image (at least 300 dpi high-resolution tiff / jpeg format) must include a caption. Prototypes to be shown in video must not be longer than 3 minutes. The video URL should be listed in the submission for the judging panel to access. Additional articles, press or peer reviews, reports, etc., can be included as annex in the whitepaper.

Judging

The Pre-Selection Judging Panel will select up to 10 entries for Phase II of the SG Challenge. The members of the Pre-selection Judging Panel are:

- Prof Lim Hock, Director (Research Governance and Enablement), Office of the Deputy President (Research & Technology), National University of Singapore (NUS) and Chair of the Pre-selection Judging Panel
- A/Prof Tan Say Beng, Executive Director, National Medical Research Council
- Mr. Ong Yunn Shing, Director, Ageing Planning Office, MOH
- Prof. Peter Edwards, Director, Singapore-ETH Centre Future Cities Lab
- Prof. Soo Khee Chee, Dy Group CEO (Research and Education), Singapore Health Services (SingHealth)

Submissions will be assessed based on the significance and innovativeness of the research proposal, application potential, and the competencies of the proposer(s).

The GYSS@one-north secretariat will inform participants of their shortlisted entries via email for Phase II of the SG Challenge, by **Friday, 14 November 2014**.

Phase II.

Shortlisted participants will present their ideas to a panel of judges and invited guests on Friday afternoon, 23 January 2015, prior to the GYSS@one-north 2015 Closing Ceremony. Each presentation should be done by a single individual and be no longer than 8 *minutes*. There will be no Q&A. Presentations can be done through powerpoint slides, videos, technology demonstrations, and so on.

In preparation for the presentations, shortlisted participants are requested to submit a 5-minute video of their presentation, a copy of their presentation (either in pdf or powerpoint) and the final proposal, to the GYSS@one-north secretariat. Please note that only the video link for the presentation should be sent to the secretariat. The final proposal can be a detailed version of the white paper but should not exceed 3,000 words (Arial, font size 12, 1.5 line spacing). These submissions should reach the GYSS@one-north secretariat no later than **Friday, 9 January 2015, 1700 hrs (Singapore time)**. Failure to do so will result in *disqualification* from the SG Challenge 2015.

The Final Judging Panel comprise the following:

- Prof Edward Holmes, Advisor (National Research Foundation, Prime Minister's Office, Singapore) and Chair of the Final Judging Panel
- Prof Lim Hock, Director (Research Governance and Enablement), Office of the Deputy President (Research & Technology), NUS
- Ms Teoh Zsin Woon, Deputy Secretary (Development), MOH
- Sir Tim Hunt, Nobel Prize in Physiology or Medicine (2001)
- Prof Michael Grätzel, Millennium Technology Prize winner (2010)
- Prof Aaron Ciechanover, Nobel Prize in Chemistry (2004)
- Prof. Ivy Ng, Group CEO, Singapore Health Services (SingHealth)

A single cash prize of USD100,000¹ and the SG Challenge Medallion will be awarded to the most compelling idea in recognition of the novelty and potential impact of the proposal. The prize recipient is encouraged to use the prize money to further develop the proposed idea, in partnership with the appropriate Singapore public agency or government-funded research institute/laboratory.

¹ The prize money will be distributed via a two-stage process. 70% will be immediately released to the prize recipient, while 30% will be subsequently released no later than six months after the conclusion of the SG Challenge. The SG Challenge winner will be expected to follow up with the SG Challenge partner agency, MOH, to develop the idea further to explore the potential for collaboration. The SG Challenge winner may be invited to attend GYSS@one-north events.

GYSS@one-north will retain all submitted information for the SG Challenge and reserves the right to use the submitted information for all GYSS@one-north-related publicity collaterals and activities (e.g. exhibitions, publicity etc.). All submissions may be shared with Singapore Government agencies only for their consideration to explore collaboration with the proposer.

The GYSS@one-north Organising Committee reserves the final right to decide on the prize winner.