## 2<sup>nd</sup> Forum of Asian Institutes for Advanced Studies (1 to 2 December 2016, Nanyang Technological University)



Institute of Advanced Studies



**2nd Forum of Asian Institutes for Advanced Study** 1 to 2 December 2016 • Nanyang Technological University, Singapore

The Forum was held from 1 to 2 December 2016 at the Nanyang Executive Centre, NTU. It witnessed the active participation of Institute Directors from not only Asia, but also Europe and South Africa. There was thus a good mix of IAS representatives from both the developed and developing nations, contributing to the Forum's diverse discussion on the topic of IAS's role, as well as the unique challenges encountered by the various institutes. During the 1<sup>st</sup> Forum in 2011 in Korea Institute for Advanced Study (KIAS), the participating IASs were institutes for sciences such as theoretical physics and mathematics. In this 2<sup>nd</sup> Forum at NTU, the participating IASs include centres for humanities, social sciences and interdisciplinary research as well.

We are honoured to have Fields Medalist Professor Ngo Bao Chau as keynote speaker. There are not many Fields Medalists in Asia. Professor Ngo gave a very interesting keynote talk on "The role of IAS in a developing country: the case of Vietnam Institute for Advanced Study in Mathematics (VIASM)".

During the Forum, the importance of IAS as a medium for interdisciplinary connections within the university was highlighted. Many participants also regarded IAS as a platform which

allows them to take a leap towards international collaboration, especially in the area of knowledge advancement and in raising the level of research quality. Many Directors also foresee greater international collaboration through networks such as the UBIAS (University-Based Institutes for Advanced Study), joint workshops, and international fellowship programmes as well as public outreach schemes. Many of these leaders believe that the commendable reputation and stability of the IASs could be tapped on positively, to boost the standards of their own institutes as well.

One of the important breakthroughs is that this is the first time that most European based IASs such as Birmingham, Munich and Warwick have joined the Forum with Asian IASs. This will ensure future collaborations between Europe and Asia.

The Forum was also an eye-opener, for it brought to light the emerging ties between NTU and other institutes. These connections are reiterated by Professor Giorgio Riello from Warwick Institute of Advanced Study, who brought up the Warwick-NTU Joint PhD Programme in Neuroscience and the NTU-Warwick Double Masters Programme in Politics and International Studies which were drawn up under an agreement between both universities. Other fresh links include the Afro-Asian partnership and more specifically, the University of Johannesburg-NTU synergy highlighted by Professor Peter Vale, which look forward to both cross-disciplinary and cultural exchange of knowledge across the cities of Singapore and Johannesburg.

An issue that was succinctly brought up during the Forum was a debate about whether the IASs should emphasise on conducting basic research, or applied science research. The discussion generated a spectrum of opinions, with most opinions geared towards the idea of prioritising curiosity-driven research. Yet, as ideal as curiosity-driven research may sound, Professor Chong Chi Tat from Institute for Mathematical Sciences, NUS iterates that such research is not entirely feasible, for it is challenging to propose it in a small, pragmatic economy such as Singapore's. In order to obtain funds to carry out curiosity-driven research, the institute must be able to convince the government that their research has the ability to produce a tangible impact on its economy.

Another recurring topic of discussion is with regard to the role of IASs in developing countries, most of which face limitations in their research endeavours due to the lack of funding. Professor Eliezer Rabinovici of Hebrew University believes that IAS serves as gates in countries where research was unappreciated. It opens up doors by demonstrating quality research to the masses, and in the process, piques the interest of the next generation towards specific subjects. However, due to scarce financial support, these are not easily achieved by developing countries for they are persistently hindered by issues such as shortage of manpower, impermanent facilities and research staff, etc.

In the general aspect of funding, many institutes agreed that public funding places great pressure on the recipient university to adhere to the demands of the government, thereby limiting their creative interest in the field of research. This is a very common problem in Asian institutes, but not so much in the European countries such as Germany, as the former places great emphasis on practicality.

Lastly, there are proposals to combine the study of humanities with that of science more actively, when it comes to solving humanity's problems such as climate change and energy shortages. Although many Directors believe that the IASs have the potential to solve humanity's problems with the help of research, they also raised that the potential of research and discovery ultimately lies in the hands of governmental policies.

In conclusion, this 2<sup>nd</sup> IASs Forum has set useful directions for the next Forum and laid out the steps which respective institutes have to take, such as collectively assisting developing countries in their development of science and knowledge, working towards greater independence from the influence of the state in terms of research, as well as collaborating with the fields of humanities, and public policies to overcome physical problems faced by mankind today.

The meeting agreed that the 3<sup>rd</sup> IASs Forum will be held in two years' time, either in China or Japan. More details will be discussed with KIAS which initiated the Forum.

## Directors who attended the Forum in NTU (1 to 2 December 2016)

- 1. Bao Chau NGO (Fields Medalist 2010; Scientific Director, Vietnam Institute for Advanced Study in Mathematics)
- 2. Chi Tat CHONG (Director, Institute for Mathematical Sciences, National University of Singapore)
- 3. Da Hsuan FENG (Director, Global Affairs Office, University of Macau)
- 4. Sue GILLIGAN (Deputy Director, The Institute of Advanced Studies, University of Birmingham)
- 5. Michael HANNON (Director, The Institute of Advanced Studies, University of Birmingham)
- 6. Tuan Hoa LE (Director, Institute of Mathematics, Hanoi )
- 7. Yong-Hee LEE (President, Korea Institute for Advanced Study)
- 8. Jaewan KIM (Director, Open KIAS Center, Korea Institute for Advanced Study)
- 9. Yoshiaki MAEDA (Vice-Director, Tohoku Forum for Creativity, Tohoku University)
- 10. Shigeru MUKAI (Director, Research Institute for Mathematical Sciences, Kyoto)
- 11. Kok Khoo PHUA (Founding Director, Institute of Advanced Studies, NTU)
- 12. Eliezer RABINOVICI (Professor Emeritus, Racah Institute of Physics, Hebrew University)
- 13. Ernst RANK (Director, Institute for Advanced Study, Technische Universität München)
- 14. Giorgio RIELLO (Director, Warwick Institute of Advanced Study)
- 15. Peter VALE (Director, Johannesburg Institute for Advanced Study)