Country and Province of Honor

Since 2012, an important part of the Pujiang Innovation Forum has been the Country of Honor and Province of Honor titles awarded each year to the regions that have shown leadership in innovation-driven development. This year, the winners were Israel and Jiangsu (China), respectively.

Country of Honor: Israel

China is an important strategic partner for Israel and its economy, and the Pujiang Innovation Forum represented an opportunity to boost bilateral relations between the nations and strengthen cooperation within the framework of the China-Israel Joint Committee on Innovation.

During the event, there was an interactive digital exhibit about the Israeli innovations generated by a partnership between the Israeli Foreign Ministry and the company iConception. A unique project involving Chinese and Israeli children who participated in innovation workshops on Israeli modes of working was also presented.

The Israeli representatives hosted ‘A night in honour of Israel and China’ with participation from Chinese and Israeli artists. The main event was a grand dinner, with dishes prepared by Chef Uri Navon (Machaneuyda Restaurant) and a musical performance including bagpipes and a shofar by Amir Gvirtzman.

Enhancing the cultural focus of the event was the ensemble of Israeli and Chinese actors featuring in a popular musical in China, The Jews of Shanghai.

Province of Honor: Jiangsu

Representatives from the Jiangsu province participated in the organisation of the event and, particularly, the planning of the Regional & Urban Forum. Adhering to the core goal of innovation-driven development, the province is a national leader in the implementation of pioneering technology projects.

The 2015 Forum was held at an important turning point for Shanghai, as it continues to build its reputation as a technology innovation leader. The participation of Jiangsu played a part in effectively enhancing communication and cooperation between Shanghai and Jiangsu and generated ideas for the development of the technology innovation centre planned for the city.
Imagination Sparks Economic Innovation

Professor Edmund Phelps, winner of the 2006 Nobel Prize in Economic Sciences and Dean of Newhuadu Business School in China explains how the economy can be boosted through creativity and business expertise

Your career in economics was sparked by your father and propelled by your Nobel Prize in 2006 for the ‘analysis of intemporal tradeoffs in macroeconomic policy’ with a focus on consumption, inflation and unemployment. How much has changed in the past nine years?

What has changed is that I have switched from macroeconomics to the study of innovation – its sources and valuableness. I wrote a paper on innovation in 1966 and came back to it in the early 2000s. But in 2006, I began working full-time to develop further ideas and to test them against evidence.

Can you outline your current endeavours and motivations, and explain how they align with the issues we are facing today?

My main thesis these days is that in any largely developed country, there is tremendous potential for innovation deriving from the creativity of people working in the economy, particularly the business sector. The economy could be organised to offer participants – from experts to workers with ordinary backgrounds – chances to use their imagination and their business savvy to conceive new products and better methods. Such ‘grassroots dynamism’ would be capable of bringing pervasive innovation. Workers participating in this dynamism would find it more rewarding than doing the mechanical jobs that cranes, computers and robots can now do.

What is the relationship between innovation and standard economics?

Standard economics has no room for creativity since this familiar economics supposes that everything that can be known is already known. If business knowledge is already complete, there is no possibility of conceiving new products and methods not previously known.

How might an economist navigate barriers to the development of new products and ways of selling?

An economist who thinks like me would call for breaking up any vested interests that are blocking the entry of new firms with innovative ideas. Such an economist would also call on the nation’s government, community or family to stop their efforts to supress innovation through regulations and bureaucracy. Furthermore, such an economist would attack educational systems that fail to inspire students with the vitalist literature of adventure, exploration and discovery that lies at the core of the Western cannon. Such an economist would also attack the sort of family that, in its over-protectiveness of children, prevents them from growing into healthy adults who think for themselves, who want a life of excitement and change, and who are willing to chance journeys into the unknown.

Can you comment on the twin foci of the Newhuadu Business School: business and education?

The Newhuadu was one of the first, if not the first, business school to recognise the importance of innovative enterprises managed and staffed by people exercising their imagination and ingenuity.

Could you briefly introduce the speech you gave at the Pujiang Innovation Forum 2015?

I argued that China will not get out of the ‘middle income trap’ simply by copying the innovations being made in the West; even if the copying did bring rising wages to China, the innovations can be expected to contribute to rising wages in the West too, so the copying will not pull China out of the middle-income category. To have a top economy, China must be able to produce sustained indigenous innovation of its own, just as the US, UK, Canada and Sweden are doing.

Furthermore, we may suppose that most Chinese people want the experience of prospering or succeeding – getting better at the work one is doing, thus obtaining better terms and recognition, and having a sense of achievement. Many Chinese individuals may also come to want the experience of flourishing – to have the fascination of the journey and to attain unimagined personal growth. To have this experience, China will have an economy driven by indigenous innovation – innovation that springs from the people, not from Schumpeterian innovations that are merely ‘obvious’ commercial applications of discoveries made by the world’s scientists and explorers or the creations of, say, composers and novelists.

Why did you decide to participate in the Pujiang Innovation Forum?

It was an honour to be selected to give my views on innovation in general and some of my views on Chinese economic development in particular. I also hope that my appearances at such conferences help to make the Newhuadu Business School more visible, where I have been Dean since its inception in 2010.
Key Talking Points

The Enterprise Forum: Forging Open Innovation Organisations

As economic globalisation advances, there is a growing trend towards cyber-based organisations and business models. Evidence-based research, technological innovation and international vision are propelling China’s enterprises. With growing competition, such as that triggered by the increasingly prevalent crowd-funded start-ups, businesses are starting to ask questions, including: how can innovation be more efficient and rewarding? How can resources be allocated around the globe so that companies can embed themselves as an organic part of the global innovation network? How can they move up the industrial chain and provide high value-added products and services of superior quality?

The Technology Finance Forum: Jointly Building a Technology Finance Ecosphere

“Technology innovation has become the key factor to enhance the overall national strength as well as the strong lead for the change and advance of the social production mode and people’s way of life. The one who holds the key and makes the upper hand move in technology innovation will gain the initiative and the advantage,” President Xi Jinping stated. The Forum actively explored how financial firms, in the face of scientific, technological and industrial revolution, can play their role as a strong driving force to build an innovative financial platform to meet the needs of technology start-ups. The core objective of this session was to discuss the creation of a science, technology and finance ecosphere to promote knowledge exchange, resource sharing and continued innovation in mutually beneficial ways.

The Policy Forum: Formulating Open and Inclusive Policies

In the face of economic and technological globalisation, China is becoming increasingly dependent on overseas markets and innovation resources. While cementing its place in the global innovation network, China is aiming to develop more open and inclusive policies that involve a plan for technological progress that draw on both valuable domestic and international expertise. These policies should also enable the viable development of micro and SMEs and the bolstering of weak industries and late-developing regions so that they can participate in innovative activities and share the profit. The aim is also to generate a multidisciplinary collective force that drives progress in the nation.

The Regional & Urban Forum: Construction of the Global Technology Innovation Center and Regional Development

After three decades of rapid growth for China’s economy, the pace is beginning to slow. Thus, in order for the country to restructure its economy, it is building innovation centres with regional or even global influence. Regions have set their objectives based on specific geographical advantages, innovation capability and industrial expertise. In its campaign to open itself further to national and international opportunities, China is building a free trade agreement with neighbouring countries, creating unprecedented development opportunities for coastal and border regions. Questions asked during this Forum included: what kind of role should China play in the global arena of development? What should China do to build influential new regional technology innovation centres and growth poles with distinct features so as to realise balanced and sustainable regional development? The aim is to provide forward-looking opinions and policy proposals for governments at various levels to optimise resources and guide regional innovation endeavours.

The Industry Forum: Intelligent Healthcare

The healthcare industry is embracing the surge of technological innovations through the use of the internet, mobile communications, Internet of Things, cloud computing and big data. For example, electronic health records can be created and shared to help clinicians provide personalised treatment. China’s goal is to create an interconnected, reliable, intelligent and innovative healthcare industry. In order to do so, the country is working towards an efficient way of learning about the latest breakthroughs and international expertise, identifying the problems associated with the current system and ensuring it is legally sound.

The Culture Forum: A Culture of Innovation in the Internet Age

The Third Industrial Revolution was characterised by the power and possibilities the internet presented, such as more advanced electronics and automated production. Now, some economists are saying the Fourth Industrial Revolution is on the horizon, with the Internet of Things, 3D printing and driverless cars enabling an even closer relationship between human and machine. This surge of technology has prompted a ‘from the bottom up’ culture, where self-starters are at the core of social reform. As China is accustomed to a ‘from the top down’ approach, the nation must consider how it will respond to new technologies and reform itself as a leader in this area, moving from ‘made in China’ labels to products being renowned for being created in China.
Representing the simulation core of the Human Brain Project (HBP), the Blue Brain Project (BBP) was set up to build biologically detailed reconstructions of the rodent brain and, eventually, the human brain. Can you explain how enhanced mapping will help scientists to better understand neurodegenerative and cognitive diseases?

The Medical Informatics subproject of the HBP is focused on identifying the signatures of brain diseases and disorders from clinical data. By better defining and diagnosing diseases from specific measures (brain imaging, biomarkers, genetics, etc.) we will have better hope of identifying the actual causal mechanisms of the disorders. Detailed biophysical modelling provides a way of testing hypotheses of specific disease mechanisms by implementing them in silico and evaluating the impact on network structure and function in a simulation.

What inspired the name and concept of the BBP?

The supercomputer that made the first simulations possible was the BlueGene/L from IBM (Big Blue). Thus the ‘Blue Brain Project’ was appropriate because we started with a technology partnership with IBM using the BlueGene.

The BBP’s digital reconstructions are continually being refined and updated. At what stage is the Project at present?

We delivered and published the first major paper about our virtual circuit reconstruction recently. However, we have been developing many of the technologies and workflows for building larger brain regions and initial drafts of the whole brain.

What was the focus of your presentation at the Pujiang Innovation Forum 2015?

I presented an overview of the HBP with an emphasis on the importance of global collaboration.

There is a tremendous opportunity for international collaboration around the brain. No single country will solve the problem of understanding the brain and each country brings its own strengths. My hope is that we can arrive at high-level commitment to data sharing and collaboration so that the great complexity and mysteries of the brain can be understood even sooner.

Why did you choose to participate in the event? What are the benefits of such a conference?

It is important to reach a broad audience, in particular, international leaders and innovators, to ensure awareness of what the project is developing and to identify opportunities for collaboration.
While cementing its place in the global innovation network, China is aiming to develop more open and inclusive policies that involve a plan for technological progress that draw on both valuable domestic and international expertise.