Prasit Palittapongarnpim – Executive Vice President, Research and Development Management and International Collaboration, NSTDA, Thailand



We are working on developing technologies and products to support public health, improve efficiency in healthcare budgeting and deal with emerging diseases.

02.08.2019

Tags: Thailand, NSTDA, Research

Prof

. Dr. Prasit Palittapongarnpim, Executive Vice President of Research and Development Management and International Collaboration at the Thai National Science Technology Development Agency (NSTDA), explains the main challenges and priorities of the organization, which operates under the Ministry of Science and Technology. He highlights the work currently being done on a new Health and Medical Cluster which aims to make Thailand a partner of choice for international collaboration.

Can you introduce yourself and the NSTDA?

After starting my career in molecular biology and the epidemiology of Mycobacterium, I worked in various organizations and administrations in Thailand. Today, I take care of research and international collaboration at the NSTDA. The NSTDA is an organization operating under the Ministry of Science and Technology since 1991. The research institute has more than 2,000 people

working in it and aims to be a key player in creating a knowledge-based society through science and technology.

What are the key missions of the NSTDA especially in the Health and Medical cluster?

Our institute is dedicated to agriculture, physical science, computer science and healthcare. The NSTDA is also focusing on more niche research such as emerging infectious diseases. Our main mission is to drive Thailand's science, technology and innovation by encouraging research and development, developing human resources in those fields, transferring technology to benefit end-users and building the fundamental infrastructure for science and technology.

Regarding the Heath and Medical cluster, the aim is to promote Thailand as a medical hub. Nowadays people are flying to Thailand from abroad to receive treatment and therapy here. This is a great compliment of our hard work. We are working on developing technologies and products to support public health, improve efficiency in healthcare budgeting and deal with emerging diseases. This cluster comprises three research programs: the newly emerging diseases and re-emerging disease program, especially in infectious disease and dengue, the medical biotechnology program, and the medical device and digital healthcare program.

What are your current key priorities?

Currently, one of the NSTDA's main projects is the Genomics Thailand Project, which aims to sequence the genomes of around 50,000 Thai people and use this information to develop a healthcare system that incorporates genomics information. We are trying to provide funds to some key hospitals to help them to develop the sequencing capacity for health service. Chulalongkorn Hospital in Bangkok is one of the few hospitals in the world that routinely provides whole genome sequencing services for sick newborns and children. We would like to expand this service around Thailand, but it is still at an early stage.

Regarding international collaboration, we are pushing to develop collaboration with other countries to support our work and improve our research. In this case, we are working closely with the UK, other European countries, and Japan, mainly on genomics and infectious diseases. In this area, we are also collaborating with the Chinese Institutes. We are increasing the international awareness of Thailand.

With the opening of the Thailand Science Park, Software Science Park, and Eastern Economic Corridor of Innovation (EECi), Thailand is looking to set itself apart from other innovation hubs in Asia. Why should companies choose Thailand rather than Taiwan, Hong Kong, China, or Korea?

Thailand has an excellent level of expertise in certain industries. We are able to compete with Singapore and Japan in the area of infectious diseases for example, if we compare our populations and the quality of our services. We cannot deny that we have a good international healthcare system for Thai and international patients here. Thailand has many different diseases, so we need to develop the private sector to provide better services for our patients. The production of drugs is difficult for a country like Thailand due to competition coming from countries like China or India. So, we are trying to develop the vaccine industry, which could be one of our strengths globally, and try to attract international companies to produce their vaccines in Thailand. We support the development of vaccine activity here, we already have some contracts with private companies, and we are progressing to attract more and more.

In 2017, the NSTDA launched a 2017–2021 Five Year Plan. As we stand halfway through this plan, in 2019, how has the NSTDA been progressing towards the Plan's main objectives and priorities?

The NSTDA's Five-year Plan aims to enhance the nation's competitiveness, drive forward the economy and support the Thailand 4.0 agenda. The Plan focuses on areas including technology which supports children's health management, personal health record systems, accessible health information and mobile applications for personal health monitoring and advice, integrated database on health, assistive and independent living technology, technology and content for distance learning, technology for monitoring, prevention and surveillance of diseases, modern and traditional medicines, vaccines and medical devices, technology supporting emergency medical services, and referral management. We are still working to reach all our goals, but we are progressing well. We understand that the private sector is important and are very focused on understanding their needs. The response rate from the private sector has been quite good.

Everyone is pulling in the same direction, in long term relationship and collaboration.

In which areas can Thailand improve to foster more international partnerships and increase foreign investment levels? Is Thailand ready to host a biotechnology industry?

First of all, with all our efforts on innovation, we are truly convinced that Thailand is the perfect place to receive foreign investment. The NSTDA has been working on developing creativity and innovation for the past few years. We are helping start-ups to set up their businesses in Thailand and develop their innovative products. For the moment we are more interested in biopharmaceuticals than small molecule drug companies because we know that we still have to make an effort to be more attractive.

We have been creating a plan for biopharmaceuticals with some universities to use their facilities and develop the industry even more. We also have the talent to attract more private companies. More and more scientists are going abroad for their studies and come back to the country in order to develop their ideas and research. We would like to carry on improving our people in term of excellence and advanced training. With more and more well-trained people and the certificate of excellence, we will be able to attract more international collaboration.

Where would like to see the NSTDA in five years?

In five years, the NSTDA’s Strategic Plan will have come to the end, I am hoping that we will have reached all our goals and developed all the specific areas that we targeted. As long as we progress, we will be happy with our achievement. Regarding the Genomic project, I hope that within five years, we will be able to integrate more genomic technologies into the health service, and into the treatment of tropical disease. One of the assets of the NSTDA is the people who are working here. We have a very passionate, hardworking, and enthusiastic team. Thailand is an enjoyable environment with a lot of strengths in its healthcare and life science industry. Thailand should be considered a destination of choice when people are thinking of expanding their business.

See more interviews