

PM-STIAC is focusing on ambitious scientific projects: Prof VijayRaghavan

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"Industry investment in R&D barring few exceptions is not sufficient in our country."



(L-R- Prof K VijayRaghavan- addressing the audience; seated dignitaries- Dr. Raja Mugasimangalam; Dr. Sudha N Rao; Dr. Samir K Brahmachari; Dr. Krishnamoorthy Kannan; Dr. PM Murali)

At the recently held two-days genomics conference Genomics India 2019 in Bengaluru, Prof K. VijayRaghavan, Principal Scientific Advisor to the Government, shared his thoughts on conducting big ambitious scientific projects in India. He mentioned that the newly formed 21-member advisory panel on science, technology and innovation called Prime Minister's Science, Technology and Innovation Advisory Council (PM-STIAC) aims towards addressing this thought.

"Our basic scientists in biology have not yet put in place a big ambitious project to work upon. Projects have usually been carried out at sub-optimal levels so far in India in the field of biology. Although the biotech industry in India has been doing exceedingly well, the amount of investment in research projects is very less. Industry investment in R&D barring few exceptions is not sufficient in our country. On the other hand, global companies such as Google and Amazon spend huge amounts on their R&D projects. This is not feasible with the Indian companies since there is no risk capital available. We need to mitigate the risk capital. This can be addressed if research laboratories work intricately with the industry and are able to translate the research thereafter. Also, the research environment at the laboratories in India has to be more flexible and less restricted. By giving more freedom to research, bigger projects can be carried out. PM-STIAC is in favour of going ahead with big ambitious projects such as genomics. We should move beyond our view point in genomics and understand it well. Conducting a genome project is a huge task which will involve sequencing, interpretation, genetic counseling and data privacy. There are also a lot of threats associated with sequence interpretation that needs to be conducted well. There is a huge complexity in relating genotype to phenotype. In order to go ahead with a genome project, a large number of genetic counselors would have to be trained. We need to understand that India has a huge population, and conducting a genome

project will require a highly developed strategy. This could be developed as an ambitious project by the biologists in India", Prof K VijayRaghavan said.

Adding some more thoughts on the potential of genomics studies, Dr B S Ajai Kumar, Chairman, HealthCare Global Enterprises spoke on the clinical application of gene sequencing and other genomic related testing in oncology practice. He highlighted the approach of personalized medicine that allows doctors to select treatments to likely help patients based on a genetic understanding of their diseases.

Even though researchers all over the world are making progress every day, the precision medicine approach to cancer treatment is not yet part of routine care for most patients.

The Genomics India 2019 conference brought together renowned scientists on one platform in order to discuss the hold of genomics in crop research, plant protection, diseases such as cancer, diabetes, cardiometabolism, AMR, nutrient deficiency and much more. With a focus on sharing path breaking-research findings to indigenous products that address local needs, the conference provided insights into the advances in Genomic technologies and their novel applications in various fields. The conference offered unlimited opportunities for interactions with experts from academia, Startups industry, venture capitalists, government, profit and non-profit organizations of the biotech sector.