

'India's challenge is to build excellent scientific research at basic level'

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Prof Mayor received his Master's degree in Chemistry from Indian Institute of Technology, Mumbai. He then received his PhD in lifesciences from Rockefeller University.

He started his own laboratory at NCBS in 1995. He is the recipient of several national and international awards such as Infosys Prize in lifesciences, The World Academy of Sciences Award, and is a Distinguished Alumnus of IIT Mumbai.

He is also a recipient of Wellcome Trust International

Senior Research Fellowship, and now holds a JC Bose Fellowship from the Government of India. Here is an excerpt from the interview with *BioSpectrum* India.

Q. What are your major challenges in being the director of NCBS?

Prof Satyajit Mayor: I have been the dean of NCBS for the past five years, which has been a preparatory time. Being the director of NCBS is a bigger challenge. NCBS being a premier research institute for biology in the country, there are a lot of expectations. The role of a dean and a director, both have very distinct demands.

Our previous director at NCBS has left us with very high standards and values. It is going to be challenging to keep up to the same level. I'm also the director of inStem and on the board of directors at C-CAMP (Centre for Cellular and Molecular Platforms). At times, wearing all three hats simultaneously is very challenging. The NCBS director has many roles to play.

Q. How do you intend to shape research at NCBS under your direction?

We believe in recruiting good people. The recruitment of individuals is the key to building institutions. We have built an institution which deals with the whole spectrum of biology - from molecules to ecosystems. The critical mass of research cannot originate from one individual only. Rather, it has to come from a cluster of people.

So our challenge is to try and generate this critical mass for ourselves by engaging the world outside, so that we can bring in research from abroad and within the country together. This ensures that people are well connected with mainstream research, rather than being like isolated islands. At the end of the day, creativity and capacity have to be nurtured.

Q. What is the current status of biological research in India? How do you plan to handle it at NCBS?

Biological research in India is yet to reach a high level. Excellent biological research is available only in a very few places in India. Our challenge is to be able to bring them together. We conduct regular meetings, workshops and encourageour faculty to put together workshops that would be path breaking so that researchers in other parts of the world would want to work with us here.

Q. How is research encouraged at NCBS?

The expectation we have is that we would like our researchers to match up with the best in the world. So we try and create that tension. And that kind of tension generates a sense of possibility on our campus.

Q. What is the quality of life science research in India?

India's challenge is to build excellent scientific research at the basic level. Having a handful of institutions that do good research work for a country like India is not acceptable. It really depends on attracting good people. Even certain disciplines in biology have a deep tradition with works of certain individuals.

For example, chemistry and mathematics have had very good traditions in India, including physics. In physical sciences and mathematical sciences, India has had its own tradition and excellent people. Chemistry is a science where we had extremely good experimentalists and theorists.

However, biology, for some reasons, has lacked that kind of quality. India has had less excellence built in experimental sciences, maybe because of lack of researchers. Today, there is no dearth of resources, but there is a dearth of people.

Q. Do you think biological research has not been appreciated as much as it deserves in our society?

Appreciation for biological research has not always been good in our system. We have long been appreciating reciting and regurgitating things, but the empirical science does not get appreciated very much.

Q. Do you believe we are still lagging behind in the area of life science research?

Biological research has not spread like engineering sciences because people grudge the fact that you may need resources to carry out your research. There may be an underlying bias for people who do experimental research. Many think that research is only for people who are not that bright. That's totally incorrect.

In fact, our education system and most labs in schools and colleges do not even have the proper infrastructure for basic research which needs to be addressed, and this compounds the problem.