

Topic: Biotechnology researchers should focus on building startups rather than following the only path of academic research

Viewpoint 1

Biotechnology is a research-oriented subject. Study of the subject itself is very costly and time consuming but informative and worthy of pursuing at the higher level of education and research. I believe that mere passing out from a university with a Biotechnology degree and hoping to absorb again only in academics fetch nothing except generating manpower. In academics, whatever are taught are mostly a cumulative knowledge. Some or few information may not be useful for the current scenario as academics follow a syllabus within a timeframe and the syllabus can't be changed every year. But being a biotechnology researcher, you need to understand the market needs and the need of the people where biotechnology can be applied to provide with a better or entirely new product.

While graduating with academic knowledge, a researcher must focus where he or she can utilize the research knowledge to convert it to a product. Now a days, there are varieties of Govt. and Private agencies which fund research and product-oriented startups at various levels. Skill India, BIRAC, BCIL or Bio Nest, Startup India, Technology Business Incubator (TBI) Project, MSME Support Grant, Bioincubator, Technology Incubation and Development of Entrepreneurs (TIDE), TDB Seed Support Scheme, and NSTEDB Seed Fund Support Scheme are some of the Govt. schemes which provide support at different levels to startups. Apart from them, there are many private big industries and organizations including lots of investment bankers and angel investors which support startups.

India is called as the marketplace of the world with a population of 1.4 billion. A startup doesn't need such a huge consumer group initially. Startups don't merely add to the generation of manpower. Instead, they absorb the available manpower for production purpose. North-East region of India is full of natural resources. Optimum exploration of the resources eventually leads to the creation of startups. Govt. of India has a mission namely Waste to Wealth Mission where funds are provided for better waste utilization and to recycle them to generate new useful products. So,

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I believe that if biotechnology researchers are focusing on exploring their already acquired academic knowledge and skills, they should be no more dependent only on academic research for a sustainable independent life.

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Viewpoint 2

Biotechnology is a knowledge and passion-driven subject. The subject is learnt at a very minute level and a very delicate and deliberate study and teaching is needed to strengthen the knowledge base. Every researcher must have to come out from some or other academic institutes. Whatever is taught in academics builds the foundation for further expansion of knowledge. Now a days, everyone is talking about startups in every sector. But, biotechnology is such a costly sector that mere investing in the startup comes up with nothing. A deep foundation and experience are much needed for the purpose. An academic institution is the best place to get it right. Academics has the best brains who think differently to create the next level of researchers.

Strengthening academic research in various institutions will bolster the research base. Academics has the best probable outcome to enter the big industry. It is not everyone's cup of tea to venture in to a risky business of startup. It is seen that various startups couldn't sustain due to wrong market study and incompatible product development. When a researcher is passed out from academics, he must come out with enough experience and knowledge. This can be provided with strengthening the academic research only. Without the proper experience and knowledge, a fresher is nowhere warranted for inclusion in a big company. Without investment in the academic research, the generated manpower will be a mere person with degree without knowledge. A dedicated research wing in all academic institutions with proper monitoring is necessary for this. Mere teaching leads to nothing, if a subject like biotech is not explained through modern updated

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facilities. Academic research definitely does technology transfer to the industries. Investment in academic research is less risky and the probable outcome is exceptionally fruitful.

Academic research doesn't mean that the researchers will keep doing only basic research. Academic research can also be made product-oriented by signing MoU with companies. But when you are strengthening academic research, eventually you are strengthening the base for another 100 researchers. Lots of external funded startups and funding agencies need academic support and affiliation as that is the safest way to make startups perform. So, it's always better to fund and strengthen academic research rather than only running behind startups.

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