Shaping Life Sciences for the Future

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The world of life sciences and biotechnology is changing at a breakneck pace, propelled by discoveries through biology-driven approaches, and by the use of artificial intelligence and by computational approaches. To be globally competitive and nationally relevant will require a structured approach, which, if done correctly, will pay off in a decade or two. There is a very special role for the Department of Atomic Energy in shaping the future of biology in India. The DAE family is a powerhouse that can anchor change in a manner no other agency can. However, we need to pivot from only recognising the legitimate strengths of what we have done and are doing into ways by which we can aggressively shape the future. This will require embarking on well-defined long-term missions. Dedicated management and mission leadership will be needed for these collaborative missions. Ways of ensuring long-term support are needed. Success will come only from the missions closely collaborating with industry and the university system. I will give a few examples of the kinds of missions we can undertake and how they could be structured for maximum efficiency.