

Science meets life

Dr Sanjiban Banerjee On His Vision To Eliminate Drug Resistance

Samaira Verma, AIS Vasundhara 1, X D

Meet Dr Sanjiban Banerjee, a molecular biologist, and the co-founder of AbGenics Life Sciences Pvt Ltd., a Pune based biotech company that develops novel therapies for cancers and infectious diseases. Dr Sanjiban is also involved with holistic causes like using modern research methodologies to understand the connection between spirituality and science. His projects have been funded by Bill & Melinda Gates Foundation; and have won multiple awards. As a jury member at Youth Power 2021-22, he interacts with GT reporters and shares his passion for science, his vision to eliminate drug resistance, and more.

On the subject

Molecular biology is a specialised area of study where you learn to make new things. The subject does not offer regular jobs but teaches you to identify the problems faced by mankind and then solve them with an entrepreneurial spirit. Fortunately, I never felt any

pressure from my parents, or peers to choose a more traditional stream, so this gave me an opportunity to freely pursue molecular biology and develop my own concepts. In fact, my family and friends were curious about the subject because back then, nobody had heard about molecular biology.

On the genesis of AbGenics

I was working in the United States when I decided to come back to India and start an organisation dedicated to controlling infections. AbGenics was founded in 2010 and since then we have focused a lot on the problem of antibiotic resistance. There are many people on whom drugs don't work at all, so we need to build a drug that bacteria are not resistant to. We are developing a new class of molecules based on antibodies that will eliminate this problem and, if successful, it can bring about a huge change in the world.

On Indian medical research

Things are getting better by the day. When I made up my mind to solve the problem of drug resistance, I not only built a laboratory, but also bought the required instruments, and got all the regulatory approvals, etc. However, if I talk about my professors and guides, they did not get these facilities or resources and had to conduct their research in foreign land.

With time, there has been a huge transformation as now research work in India is no more dependent on countries like USA, Russia, UK, in fact, one can find many research options these days along with the resources.

On the impact of science

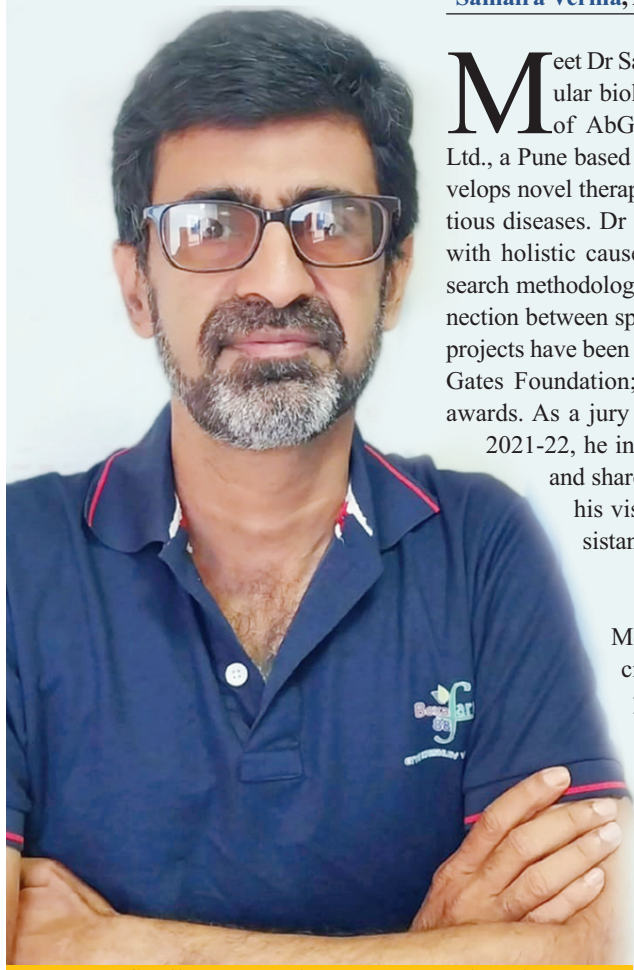
Molecular biology has taught me to be curious and understand how things work fundamentally. For example, when I see a pink flower which smells nice, I know about the genes responsible for its colour, or how its fragrance is affecting my senses. So, I can truly experience the flower. Also, I can handle tough situations because I can identify the problem fundamentally and solve it accordingly. Research has taught me a lot of humility as well because many a times experiments fail, and one needs to be detached about what one is doing. As written in the Bhagavad Gita, "One must do his task and not worry about the expected outcome."

On his message for Amitians

Apart from doing hard work and making a career for yourself, you need to be compassionate, be a good person and love others. Combining all of this, you will live an exciting life and shape it accordingly.



GT reporter in talks with Dr Sanjiban online



Dr Sanjiban Banerjee, molecular biologist

Be water wise

At IWW, Amity Showcases Projects To Save Water

AIETSM | AUUP

Amity University Uttar Pradesh participated in the 7th edition of India Water Week*, held from November 1-5, 2022, at India Expo Centre, Greater Noida. The event was inaugurated by the President, Droupadi Murmu, in the gracious presence of the chief minister of Uttar Pradesh, Yogi Adityanath and minister of Jal Shakti, Gajendra Singh Shekhawat. Being the only university showcasing water technologies as part of India Water Week, the event holds a great significance for Amity in view of the national mission on water resources conservation and management. Several faculty members and students participated in the India Water Week where several talks, seminars and technical sessions were held. On the first day, Prof Tanu Jindal, group additional pro vice chancellor (R&D) and director, delivered a talk on the topic



Prof Tanu Jindal displays her project

'Fresh Water Resources, Quality Issues and their Management'. Apart from this, several projects under seven technologies, namely pocket friendly water purifier, electricity from wastewater and self-cleaning of water, water meter for detection of chromium in water, lysimeter for leaching studies, water testing kit, etc., were also showcased during the exhibition.

This highly informative event concluded with three technical sessions on managing water related disasters, establishing a col-



President Droupadi Murmu and esteemed guests at India Water Week

laborative water governance regime and water for environmental livelihood. Students were also given an insight about water conservation through four panel discussions on challenges in urban water planning and management, converging towards National Perspective – IBWT, agriculture sustainability under unforeseen circumstances and the role of hydropower for energy security. Other absorbing topics that witnessed a great response from participants and audience alike were technology and innovation in

water management and India-EU partnership. In addition, several other events were hosted by the Ministry of Jal Shakti, National Hydrology Project (NHP) etc. The valedictory session was chaired by the Vice President of India, Jagdeep Dhankar.

*India Water Week is a multi disciplinary international conference that brings together policymakers, innovators, and statesmen under one roof in an attempt to identify and build technological, political and social security to save water.