REPORT OF WEBINAR

Making of a Scientist

Organized by TechPioneers, Computer Science Society,
Aryabhatta College

Abstract

TechPioneers organized a webinar on "Making of a Scientist" on 28th February 2023.

The guest speaker for the webinar was Professor Pawan Dhar from the School of Biotechnology, JNU.

WEBINAR ON MAKING OF A SCIENTIST

(28th February, 2023)

TechPioneers, the Computer Science Society of Aryabhatta College, successfully conducted a webinar entitled "Making of a Scientist", on the occasion of National Science Day, 28th February 2023.

The guest speaker for this session was Professor Pawan Dhar from the School of Biotechnology, JNU. The session lasted about sixty minutes and the students participated actively and enthusiastically by asking thought-provoking questions that contributed to a stimulating discussion. Prof. Pawan Dhar highlighted his personal journey as a scientist, outlined the key steps involved in pursuing a scientific passion, and delved into some fundamental biotechnology concepts applicable in the modern world.

Objective

The prime aim of the session was to equip the students with knowledge and understanding of the path towards becoming a scientist, highlighting the necessary skills, education, training, and experience required to succeed in the field. Additionally, the session also inspired and motivated students to pursue their passion for science and to actively pursue opportunities to develop their skills and expertise. During the course of the webinar, the speaker also threw light on relevant and renowned topics around biotechnology and how the future of this field will be shaped by the advent of artificial intelligence.

About the Speaker

Prof. Pawan Dhar is an accomplished researcher and academic who currently serves as the head of the Synthetic Biology group at the School of Biotechnology, JNU. With a PhD degree in Human Genetics from BHU (Varanasi) in 1993, he has made significant contributions to the field of molecular biology. One of his notable achievements is the development of a novel drug discovery platform from DNA sequences found in the dark

matter of the genome. Prof. Dhar has also headed research programs on metagenomics at RIKEN (Japan) and TCS (Hyderabad) and has established research labs in India, Singapore, and Japan. His research interests cover a wide range of topics, including human genetics, systems biology, and synthetic biology, spanning computational, experimental, and policy areas. His work has been widely published and recognized as an important contribution to the scientific community.

SUMMARY

Prof. Pawan Dhar shared his journey as a scientist and elaborately discussed the path to becoming a scientist. He began by sharing what science is to him and emphasized the value of curiosity in the pursuit of knowledge. He also highlighted that the journey from ignorance to enlightenment is a thrilling and unpredictable one and that one must never deter from the path of curiosity. He discussed 7 key steps that one must follow to become a scientist and they are as follows-

- 1. Identify good unsolved questions: This step revolves around getting a broad understanding of the field that interests you, reading various publications and papers related to that field and watching ted-talks around the same.
- 2. Extract the questions: This step is about extracting questions from reading original papers, methodology papers, and publications. It is all about pursuing your technical and conceptual interests.
- 3. Make strategy to answer those questions: This step involves creating a flowchart of steps that you will undertake to answer your questions and then experimenting with and at every step.
- 4. Communicating science: In this step, the professor explained different do's and dont's of scientific communication and public speaking.
- 5. Writing Publications: Students got to know different components of a publication in the order of their significance and also learned about things that they should keep in mind while write one.
- 6. Writing a good CV: In this step the emphasis was on creating an authentic CV that highlights your technical skills in the order of competency, contains a well-written summary of your projects and many crucial things like these.
- 7. Think of out the box: Students should think beyond what they see. By breaking the process of conventional thinking one can problems and challenges in new and innovative ways.

Apart from these steps, the speaker shared his thoughts and opinions on the questions that were put up by participants. Some of them were:

- 1) How we, CS students, could help in further development of biotechnology sector?
- 2) Where do you see India in the next 10 years in the biotech sector?
- 3) How AI could help in further inventions & discoveries in biotechnology field?

Prof. Dhar's discussion on the nature of science was engaging and inspiring, motivating listeners to embrace their natural curiosity and pursue scientific inquiry with passion and dedication. Overall, his presentation was a valuable resource for aspiring scientists and a testament to the importance of curiosity in the field of scientific discovery.

Event Poster



Glimpses from the session









