

Sanskriti University organises seminar on drug repurposing

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Discussions were held on the applications of QSAR in drug discovery



Sanskriti University School of Pharmacy recently organised a seminar on 'Drug Repurposing and Applications of QSAR in Drug Discovery.' Dr Anshuman Dixit, Scientist-E (Institute of Life Sciences) was a key speaker of the seminar. The seminar was aimed to familiarise students with the application of quantitative structure-activity relationship (QSAR) in Drug Discovery. The seminar was attended by Chancellor Sachin Gupta, Pro-Vice-Chancellor Rakesh Premi, Faculty Members and students of the School of Pharmacy.

During his inaugural speech, Dr Anshuman Dixit said, "Repurposing or repositioning refers to the usage of pre-existing drugs to tackle a disease other than the one that the drug was originally designed to target."

Dr Dixit also shared detailed information on the conventional drug development process involving *de novo* detection and identification of new molecular entities, including the five phases, discovery and pre-clinical, safety review, clinical research, FDA review and FDA post-market safety monitoring. It is a time-consuming and expensive procedure with a high risk of failure as highlighted briefly before, while on the other hand, the drug repositioning has only four steps, including (a) compound identification; (b) compound acquisition; (c) development; and (d) FDA post-market safety monitoring. The development of next-generation computational methods using Artificial Intelligence (AI), Machine Learning (ML) and network medicine approaches have positively impacted the different stages of a drug development process.

The increasing use of IT in the discovery of new molecular entities encourages the use of modern molecular-modelling tools to help teach important concepts of drug design to chemistry and pharmacy undergraduate students, said Sachin Gupta, Chancellor of Sanskriti University.

The seminar culminated with a vote of Thanks by Pro Vice-Chancellor Rakesh Premi.