

An Intelligence-guiding Future Research

"The future belongs to those who learn more skills and combine them in creative ways."

–Robert Greene

In this volatile era of technology, only agility is sustainable. The field of biochemistry is constantly expanding dramatically, and the more we think about it, the more mystified and intrigued we get.

The last ten years have seen increased research on the interesting nexus between the fields of molecular biology and computer science. We are fortunate to be a part of artificial intelligence (AI), which has a lot to contribute to the quick pace of research.

As we read through the studies that are published in this journal, we get to know the creative minds of our pioneering scientists, who have made use of cutting-edge technology to give us a glimpse of the future of organic chemistry's expanding body of knowledge. Many computational strategies have emerged because of the collaboration between biological science and AI.

These days, AI is increasingly used in the field of medical imaging, such as CT and ultrasound, to assist in the diagnosis of diseases and to analyze medical images to identify patterns that may indicate the presence of diseases. The use of AI in the medical sector has helped to accelerate research and has also provided us with a platform to improve the efficiency of the treatment that we can offer to our patients.

A lot of organic data, including genetic records, is already being researched using AI to find novel medication targets and identify disorders. Machine intelligence is utilized to automate and improve laboratory procedures. Focusing on proteins and attempting to understand their structure and properties has always been a constant endeavor. Currently, AI is used to extract the three-dimensional (3D) structures of proteins and other macromolecules, which can help researchers find novel targets.

The possibilities that AI opens up for academics are fascinating. First, AI can assist with the organization of recent experiments. It has enabled machines to analyze repetitive data and conduct research before imitating human behavior. AI can simulate biological system behavior and forecast the outcomes of different experimental designs. It will eliminate the need for intensive and time-consuming laboratory testing and improve studies. Years of scientific training are needed to accurately diagnose disorders. Even then, diagnosis of many diseases frequently is a taxing and drawn-out process.

Although AI is a broad term, depending on their needs, people tend to have their own unique ideas about AI. Any application of AI must start with a digital transformation. The availability of ample and high-quality data powers the AI system. The computing power of our data via AI is rapidly increasing, and this will have a big impact in the future.

In order for AI to drastically reduce errors and improve accuracy and precision in our study, it must be used responsibly so that its advantages offset the hazards to the environment. While utilizing its advancements, we must take medical ethics into account.

Additionally, it is crucial to keep in mind that learning in the age of AI requires constant updating. Our futuristic professionals must keep up with the most recent advances in biological science by reading research papers and attending conferences in order to become skilled in the partnership of biochemistry with this intelligence.

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