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ASIA EDITION

5 Largest Biotechnology Trends in 2022

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As Steve Jobs once said, Ã¢â?¬Å?The biggest innovation in the 21st would be the intersection of biology and technologyÃ¢â?¬Â•, it is no doubt that biotechnology has become the major focus of this decade.



Along with other areas of technology, the big tech companies and biological industrial assets like Yourway are trying to accelerate the development and supply of biotechnology in 2022. Let's have a look at the key trends playing a major role in the development of biotechnology.

- ## Leading-edge Computing Technology:

Technology is the core of biotech services. The advancement in modern technology like new computing machinery and artificial intelligence provides an edge to the research and development of biotechnology. The efficiency in manufacturing and trials have improved which makes it possible for biotechnology companies to bring more products to the market in less time. The ability to analyze large sets of data has reduced price tags and failure rates in the field of medicine. Cloud services have made it possible for companies to store huge amounts of data without having to buy expensive storage.

- **Increased Collaboration:**

Cloud computing storage has made it possible for big companies to share their data and collaborate to achieve a common goal. Software tools like virtual meetings, data storage and communication have made it possible for big and small academic and research institutions to collaborate regardless of their geographical locations. Increased collaboration is a slippery slope. The companies must establish intellectual property protection beforehand so that they can benefit financially from the products that are being created.

- **The Adaptation of Clinical Trials:**

In the past, clinical trials used to be a tedious process where everything happened manually. The research companies had to hire a large number of participants who had to physically go to the trials to record their symptoms and side effects. Not to mention the huge amount of resources that went into making these trials possible. Clinical trials have become highly digitized now. Pharma companies can test drugs on more people in relatively less time. The technology has made it possible to revisit the old data very easily in case the need arises in new clinical trials.

- **Personalized Treatment:**

The cost of genetic sequencing today is 300 dollars reduced from 2.7 billion dollars in 1991 (Human Genome Project). The reduced costs have made it possible today to engineer personalized treatments and targeted therapies for individuals depending on their DNA. These treatments are more effective because they are tailored according to the molecular make-up of a person. The major research in targeted therapies is focused on cancer and chronic illnesses. For example, CAR T cell therapy for leukaemia.

- **Vaccine Development:**

The search for a corona vaccine made the industry focus its resources on vaccine development. It has made the scientific community consider new and innovative ways of making vaccines. The government and private pharmaceutical companies are collaborating in this new search for innovation in vaccine development and effectiveness. The traditional vaccines are live attenuated or killed vaccines. Research and resources are now focused on finding new and better ways of preventing the spread of various infectious diseases.