

Secretomics Services Section Home

History

The origins of secretomics can be traced back to the early studies on cell signaling and communication. The discovery of hormones and their effects on distant organs laid the foundation for understanding how cells communicate. In the mid-20th century, advancements in techniques like chromatography and electrophoresis enabled scientists to isolate and study secreted proteins. With the advent of molecular biology techniques, the focus shifted towards deciphering the genetic basis of secreted molecules.

Evolution till Date

Over the years, secretomics has evolved from studying single proteins to a comprehensive analysis of secreted molecules, including proteins, peptides, lipids, and small molecules. Technological advancements such as mass spectrometry, transcriptomics, and proteomics have enabled researchers to uncover complex signaling networks and understand their roles in development, immune response, and disease progression.

Pharmaceuticals

Secretomics has revolutionized drug discovery by identifying potential therapeutic targets and biomarkers.

2.

Neurodegenerative Diseases

Understanding secreted factors in neurodegenerative diseases offers insights into disease mechanisms and potential treatments.

4.

Immune Modulation

Secreted molecules play a vital role in immune response regulation, contributing to the development of immunotherapies.