



## GLYCOSCIENCE

The growing significance of glycoscience to medical science reveals a vista of unlimited potential for Seikagaku, the industry's foremost pioneer in glycoconjugate clinical applications.



Seikagaku Corporation specializes in glycoscience. The fundamental focus of this relatively new scientific field is the molecular components responsible for signal transmission between cells. Rapid advances in science and medicine over the past two decades have shown that information systems based on glycoconjugates control or influence all life processes—including fertilization, cell growth, cell-to-cell adhesion, inflammation, immune defense, viral replications, parasitic infection, and aging—as well as cancer and other diseases.

The world is more familiar with DNA research that has opened up totally new areas of biological and medical knowledge. But, while living organisms use DNA to transmit information to their descendants, they rely on glycoconjugates to carry the information needed for day-to-day life processes. To use a manufacturing metaphor, DNA is a blueprint of a factory; while glycoconjugates represent conversations, telephone calls, faxes and other means to share information among the people who work in the factory. Just as a factory, no matter how advanced, could not function if its workers were unable to communicate with each other, so the processes of life would not be possible without the sharing of information between cells. When those information systems deteriorate, the factory becomes less efficient, and the living organism begins to suffer from disease and aging. Medicines that can restore proper cell communication or send additional beneficial messages will have a positive impact on health.