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Introduction to Immunology

In this course, I have learned about the role of cytokines in the immune response, which has significantly impacted my understanding of biomedical science and my future research interests in materials science. Cytokines are small proteins that play a pivotal role in regulating immune cells, and their interactions are essential for maintaining homeostasis in the body. This knowledge has made me realize how materials science can be applied to improve the design of immune-modulating devices. For example, engineers could develop biomaterials that selectively target specific cytokines to enhance or suppress immune responses, and in doing so, treat diseases such as inflammation or autoimmune disorders. By combining my knowledge of biomedical science with my interest in materials science, I aim to contribute to the development of innovative therapies that bridge the gap between medicine and engineering.