

Quantitative Cellular Immunology: a New Frontier for Chemical Engineering Research

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A chemical engineering education is one that provides students with the ability to think seamlessly across length and time scales about a wide variety of problems. The ability to image cellular and molecular dynamics and make quantitative measurements is revolutionizing the way in which we are learning how the immune system is regulated. I will discuss how chemical engineers can play significant roles in the discovery process in immunology, and thereby participate in the quest for understanding the origins of diseases that include multiple sclerosis, diabetes, arthritis, etc..