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Reginald L. McGee* (mcgee.278@mbi.osu.edu), The Ohio State University, 1735 Neil Avenue, Columbus, OH 43210. *Dynamic immunity: Mathematical models for B cell signaling pathways and chronic lymphocytic leukemia.*

In this talk I will discuss results from my dissertation: "Modeling, analysis, and control of Syk-mediated signaling events for B cells and associated cellular response for B cells." Primarily, I will focus on the mathematical model developed for B cell antigen receptor signaling and on experimental design results for reducing dynamic uncertainty that are applicable to nonlinear models. Additionally, I will discuss connections to my current work on chronic lymphocytic leukemia and new directions. (Received September 22, 2015)