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Anael Verdugo* (averdugo@fullerton.edu). *Analysis of a Dynamic Model of Iron Metabolism*. Preliminary report.

Computational and mathematical modeling has become an important tool for modern life-sciences research in academia and industry. Understanding the molecular interactions and metabolism of iron in healthy and cancer cells is the main goal of this work. We approach this problem by building a mathematical model using dynamical systems theory and experimental data. Our preliminary findings on healthy cells have started to elucidate some of the main pathways associated to a healthy iron regulation. In this talk, I will give a brief overview of iron metabolism and explain some of our experimental and computational findings in this new area of computational cancer biology. (Received August 25, 2015)