1106-92-1620 Rachel Leander* (rachel.leander@mtsu.edu), Murfreesboro, TN, and Edward Allen,
Darren Tyson, Shawn Garbett, Zach Jones and Vito Quaranta. Modeling the dynamics of
intermitotic time distributions. Preliminary report.

Empirical distributions of intermitotic times (IMTs) show the time it takes a cell to divide is highly variable; the final response to drug treatment is not uniform; and it takes multiple cell cycles for an IMT distribution to stabilize post perturbation. In this talk, I will present a stochastic model of the cell cycle and discuss the model's validity and biological implications. (Received September 14, 2014)