

1138-92-341

Rachel Leander* (rachel.leander@mtsu.edu), **John Ford**, **Jasmin Laurel**, **Christian Devine**, **Leonard Harris** and **Darren Tyson**. *Evaluating the role of memory in cell cycle progression*. Preliminary report.

Recent work suggests that “memories” of mitotic signaling are passed from mother to daughter cell and can heavily influence the dynamics with which a cell progresses through the cell cycle. Motivated by these experimental findings, we investigate alternative models for the role of memory in stochastic cell cycle progression and evaluate the ability of such models to describe both division time distributions and correlations in the division times of related cells. (Received February 12, 2018)