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R. Drew Pasteur* (rpasteur@wooster.edu) and **James F. Selgrade.** *Dynamics of a Human Menstrual Cycle Model with Multiple Inhibins.* Preliminary report.

In clinical studies of adult women, a variety of qualitatively different reproductive hormone profiles have been observed. We consider the dynamics of a two-inhibin model for hormonal control of the human menstrual cycle, in this regard. Based on single-parameter bifurcations and exogenous hormone treatment, predicted possible cycles could have either high or low amplitudes, or even alternate-month profiles. We relate these differences to ovulation and fertility. (Received February 09, 2009)