

1035-93-1475

Menaka B Navaratna* (mnavarat@fgcu.edu), Florida Gulf Coast University, Fort Myers, FL 33965, and **Channa N Navaratna** (channa@iup.edu), Indiana University of Pennsylvania, Indiana, PA 15705. *Synchronization analysis of a network model in mammalian suprachiasmatic nucleus.*

The means by which pacemaker cells of the mammalian suprachiasmatic nucleus (SCN) are synchronized is unknown. In the absence of anatomical data on the interneuronal connections among SCN neurons, we have modeled the SCN network in terms of a number of possible connection topologies. We employ a mathematical model proposed by Achermann and Kunz (1999), to study the problem of interpreting synchronization in the SCN network from a dynamical systems viewpoint. (Received September 19, 2007)