

1086-34-1781 **Milica Miko Vesovic*** (mvesov2@uic.edu), 851 S. Morgan St., SEO 322, Chicago, IL 60607, and
Hassan Fathallah-Shaykh and **Jerry Bona**, IL. *Drosophila Jet Lag*.

Shifts in the circadian rhythm of mammals and insects have been observed to occur during spatial dislocations involving significant time zone changes. Following such dislocations, the system of proteins that comprises the circadian clock move the body toward a new stable waking/sleeping equilibrium, consistent with the altered environment.

Using a recently developed model developed by Fathallah-Shaykh, Bona and Kadner that we believe captures the full *Drosophila*'s (fruit fly's) circadian clock, we report predictions of how the *Drosophila* adjusts its waking/sleeping rhythm to both instantaneous and more gradual time-zone shifts. (Received September 24, 2012)