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# Using fruit flies to study sleep regulation and function during development


Developmental sleep abnormalities are highly prevalent across neuropsychiatric disorders, and early life sleep may be a modifiable risk factor for these illnesses. However, the basic mechanisms underlying developmental changes to sleep remain unknown. Moreover, examination of a function for sleep in even earlier phases of brain development, when neurons are first being born, has been limited by the lack of tractable experimental systems. Research in the fruit fly, *Drosophila melanogaster*, has yielded seminal insights into the regulation of sleep and circadian rhythms, and is poised for the study of sleep during development. Sleep in *Drosophila* shares most features with mammalian sleep, including developmental changes. We use this powerful model system to determine molecular mechanisms controlling sleep maturation, and to investigate sleep regulation and function during nascent neurodevelopmental periods.