

Complete List of Publications:

1. Davis, F.C. and M. Menaker. Hamsters through time's window: temporal structure of hamster locomotor rhythmicity. *American Journal of Physiology* 239:R149-R155, 1980.
2. Darrow, J.M., F.C. Davis, J.A. Elliott, M.H. Stetson, F.W. Turek, and M. Menaker. Influence of photoperiod on reproductive development in the golden hamster. *Biology of Reproduction*. 22:443-450, 1980.
3. Davis, F.C. and M. Menaker. Development of the mouse circadian pacemaker: Independence from environmental cycles. *Journal of Comparative Physiology* 143:527-539, 1981.
4. Döhler, K.-D., A. Coquelin, F.C. Davis, M. Hines, J.E. Shryne, And R.A. Gorski. Differentiation of the sexually dimorphic nucleus in the preoptic area of the rat brain is determined by the perinatal hormone environment. *Neuroscience Letters* 33:295-298, 1982.
5. Döhler, K.-D., M. Hines, A. Coquelin, F. Davis, J.E. Shryne, and R.A. Gorski. Pre- and postnatal influence of diethylstiboestrol on differentiation of the sexually dimorphic nucleus in the preoptic area of the female rat brain. *Neuroendocrinology Letters* 4:361-365, 1982.
6. Davis, F.C., J.M. Darrow, and M. Menaker. Sex differences in the circadian control of hamster wheel-running activity. *American Journal of Physiology* 244:R93-R105, 1983.
7. Döhler, K.-D., A. Coquelin, F. Davis, M. Hines, J.E. Shryne, and R.A. Gorski. Pre- and postnatal influence of testosterone proprionate and diethylstilbestrol on differentiation of the sexually dimorphic nucleus of the preoptic area in male and female rats. *Brain Research* 302:291-295, 1984.
8. Davis, F.C. and R.A. Gorski. Unilateral lesions of the hamster suprachiasmatic nuclei: evidence for the redundant control of circadian rhythms. *Journal of Comparative Physiology* 154:221-232, 1984.
9. Hines, M., F.C. Davis, A. Coquelin, R.W. Goy, and R.A. Gorski. Sexually dimorphic regions in the medial preoptic area and bed nucleus of the stria terminalis of the guinea pig brain: a description and an investigation of their relationship to gonadal steroids in adulthood. *Journal of Neuroscience* 5:40-47, 1984.
10. Jacobson, C.D., F.C. Davis, and R.A. Gorski. Formation of the sexually dimorphic nucleus of the preoptic area: neural growth, migration, and changes in cell number. *Developmental Brain Research* 21:7-18, 1985.

11. Davis, F.C. and R.A. Gorski. Development of hamster circadian rhythms I. Within litter synchrony of mother and pup activity rhythms at weaning. *Biology of Reproduction* 33:353-362, 1985.
12. Davis, F.C. and R.A. Gorski. Development of hamster circadian rhythms: prenatal entrainment of the pacemaker. *Journal of Biological Rhythms* 1:11-89, 1986.
13. Davis, F.C., S. Stice, and M. Menaker. Activity and reproductive state in the golden hamster: independent control by social stimuli and a circadian pacemaker. *Physiology and Behavior* 40:583-590, 1987.
14. Davis, F.C. and R.A. Gorski. Development of hamster circadian rhythms: role of the maternal suprachiasmatic nucleus. *Journal of Comparative Physiology A* 162:601-610, 1988.
15. Davis, F.C. and J. Mannion. Entrainment of hamster pup circadian rhythms by prenatal melatonin injections to the mother. *American Journal of Physiology* 255:R439-R448, 1988.
16. Davis, F.C. Daily variation in maternal and fetal weight gain in mice and hamsters. *Journal of Experimental Zoology* 250:273-282, 1989.
17. Davis, F.C., R. Boada, and J. LeDeaux. Neurogenesis of the hamster suprachiasmatic nucleus. *Brain Research* 519:192-199, 1990.
18. Ralph, M., R. Foster, F.C. Davis, and M. Menaker. Transplanted suprachiasmatic nucleus determines circadian period. *Science* 247:975-978, 1990.
19. Viswanathan, N. and F.C. Davis. Maternal entrainment of *tau* mutant hamsters. *Journal of Biological Rhythms* 7:65-74, 1992.
20. Viswanathan, N. and F.C. Davis. Timing of birth in Syrian hamsters. *Biology of Reproduction* 47:6-10, 1992.
21. Viswanathan, N. and F.C. Davis. The fetal circadian pacemaker is not involved in the timing of birth in hamsters. *Biology of Reproduction* 48:530-537, 1993.
22. Duncan, M.J. and F.C. Davis. Developmental appearance and age-related changes in specific 2-[¹²⁵I]-Iodomelatonin binding sites in the suprachiasmatic nuclei of female Syrian hamsters. *Developmental Brain Research* 73:205-212, 1993.
23. Viswanathan, N., D.R. Weaver, S.M. Reppert, and F.C. Davis. Entrainment of the fetal hamster circadian pacemaker by prenatal injections of the dopamine agonist, SKF 38393. *Journal of Neuroscience* 14:5393-5398, 1994.

24. Viswanathan, N. and F.C. Davis. Suprachiasmatic nucleus grafts restore circadian function in aged hamsters. *Brain Research* 686:10-16, 1995.
25. Grosse, J., A. Velickovic, and F.C. Davis. Entrainment of Syrian hamster circadian activity rhythms by neonatal melatonin injections. *American Journal of Physiology* 270:R533-R540, 1996.
26. McElhinny, A., F.C. Davis, and C.M. Warner. The effect of melatonin on cleavage rate of C57BL/6 and CBA/Ca preimplantation embryos cultured in vitro. *Journal of Pineal Research* 21:44-48, 1996.
27. Davis, F.C. and N. Viswanathan. The effect of transplanting one or two suprachiasmatic nuclei on the period of the restored rhythm. *Journal of Biological Rhythms* 11:291-301, 1996.
28. Viswanathan, N. and F.C. Davis. Single prenatal injections of melatonin or the D1 dopamine receptor agonist SKF 38393 to pregnant hamsters set the offsprings' circadian rhythms to phases 180° apart. *Journal of Comparative Physiology* 180:339-346, 1997.
29. Morris, M.E., N. Gekakis, D. Staknis, N. Viswanathan, S. Kuhlman, F.C. Davis, and C.J. Weitz. A screen for genes induced by light in the suprachiasmatic nucleus. *Science* 279:1544-1547, 1998.
30. Gekakis, N., D. Staknis, H.B. Nguyen, F.C. Davis, L.D. Wilsbacher, D.P. King, J.S. Takahashi, and C.J. Weitz. Role of the CLOCK protein in the mammalian circadian mechanism. *Science* 280:1564-1569, 1998.
31. Davis, F.C. and N. Viswanathan. Stability of circadian timing with age in Syrian hamsters. *American Journal of Physiology* 275:R960-R968, 1998.
32. Grosse, J. and F.C. Davis. Melatonin entrains the restored circadian activity rhythms of Syrian hamsters bearing fetal SCN grafts. *Journal of Neuroscience*:18 8032-8037, 1998.
33. Grosse, J. and F.C. Davis. Transient entrainment of a circadian pacemaker during development by dopaminergic activation in Syrian Hamsters. *Brain Research Bulletin* 48:185-194, 1999.
34. Duffy, J.F., N. Viswanathan, and F.C. Davis. Free-running circadian period does not shorten with age in female Syrian hamsters. *Neuroscience Letters* 271:77-80, 1999.
35. Furukawa, T., E.M. Morrow, T. Li, F.C. Davis, C.L. Cepko. Retinopathy and attenuated circadian entrainment in Crx-deficient mice. *Nature Genetics* 23:466-470, 1999.

36. Kramer, A., F-C. Yang, P. Snodgrass, X. Li, T. E. Scammell, F. C. Davis, and C. J. Weitz. Regulation of daily locomotor activity and sleep by hypothalamic EGF receptor signaling. *Science* 294:2511-2515, 2001.
37. Storch, K-F., Lipan, O., Leykin, I., Viswanathan, N., Davis, F.C., Wong, W.H. and Weitz, C.J. Extensive and divergent circadian gene expression in liver and heart. *Nature* 417: 78-83, 2002.
38. Li, X., Sankrithi, N. and Davis, F.C. Transforming growth factor-alpha is expressed in astrocytes of the suprachiasmatic nucleus in hamster: role of glial cells in circadian clocks. *Neuroreport* 13: 2143-2147, 2002 .
39. Li, X., J. Gilbert, and F.C. Davis. Disruption of masking by hypothalamic lesions in Syrian hamsters. *J. Comp. Physiol. A* 191:23-30, 2005.
40. Snodgrass-Belt, P., J. Gilbert and F. C. Davis. Central Administration of Transforming Growth Factor-Alpha and Neuregulin-1 Suppress Active Behaviors and Cause Weight Loss in Hamsters. *Brain Res.* 1038:171-182, 2005.
41. Li, X. and F.C. Davis. Developmental expression of clock genes in the Syrian hamster. *Develop. Brain Res.* 158:31-40, 2005
42. Kabrita, C.S. and F. C. Davis Development of the mouse suprachiasmatic nucleus: determination of time of cell origin and spatial arrangements within the nucleus. *Brain Research* 1195, 20-27, 2008.
43. Gilbert, J. and F.C. Davis. Behavioral Effects of Systemic Transforming Growth Factor-alpha in Syrian Hamsters. *Behavioural Brain Research* 198: 440-448, 2009.
44. Dolatshad, H., A.J.Cary, and F.C. Davis. Differential expression of the circadian clock in maternal and embryonic tissues of mice. *PloS ONE* (in press).

Publications - Invited articles

45. Davis, F.C. Melatonin: Role in development. *Journal of Biological Rhythms* 12:498-508, 1997.
46. Dolatshad H, Davis FC, Johnson MH. Circadian clock genes in reproductive tissues and the developing conceptus. *Reproduction, Fertility and Development* 21:1-9, 2009.

Publications - Book chapters

47. Davis, F.C. Ontogeny of circadian rhythms, In: *Handbook of Behavioral Neurobiology*, Vol. 4, *Biological Rhythms* (J. Aschoff, ed.). Plenum, pp 257-274, 1981.

48. Davis, F.C. Development of circadian pacemakers. In: Melatonin rhythm generating system: developmental aspects. (D.C. Klein, ed.) Karger Publishing Co., pp 1-19, 1982.
49. Davis, F.C. Use of postnatal behavioral rhythms to monitor prenatal circadian function. In: Development of Circadian Rhythmicity and Photoperiodism in Mammals (S.M. Reppert, ed.), Perinatology Press, Ithaca, NY, pp 45-65, 1989.
50. Davis, F.C. Development of the suprachiasmatic nucleus: Introduction. In: Suprachiasmatic Nucleus: The Mind's Clock. (Klein, Moore, Reppert, eds.), Oxford Univ. Press, pp. 375-390, 1991.
51. Davis, F.C., M. Frank and C. Heller. Ontogeny of Sleep and Circadian Rhythms. In: Neurobiology of Sleep and Circadian Rhythms (for series on Lung Biology in Health and Disease), F.W. Turek and P. C. Zee, Eds., Marcel Dekker, Inc. , 1999.
52. Davis, F.C. and S.M. Reppert. Development of Mammalian Rhythms. In: Handbook of Behavioral Neurobiology: Circadian Clocks, J. Takahashi, F.W. Turek, and R.Y. Moore, Eds., Plenum Publishing Corp., Inc., 2001, pp 247-290.