

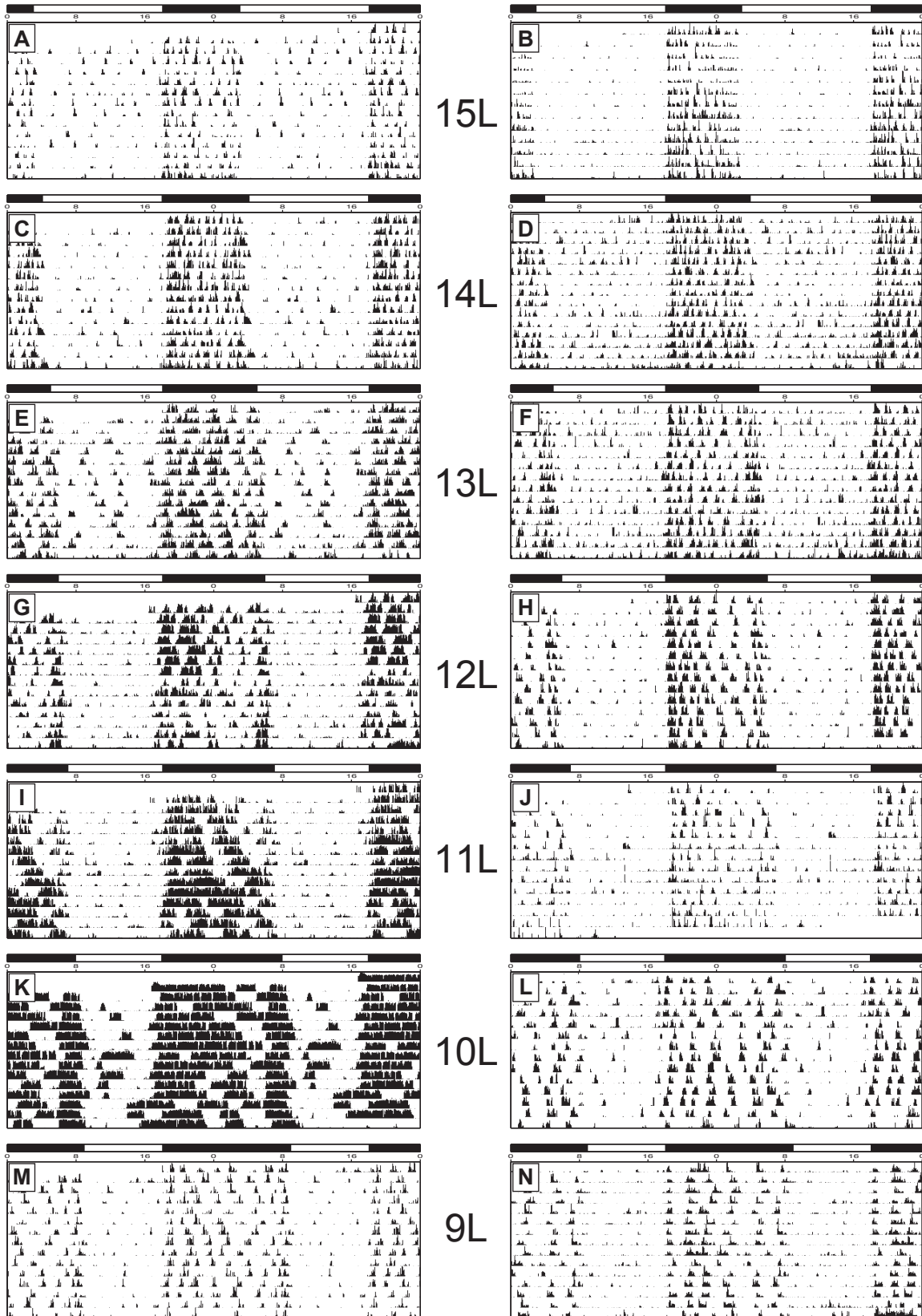
**Supplementary Online Material**

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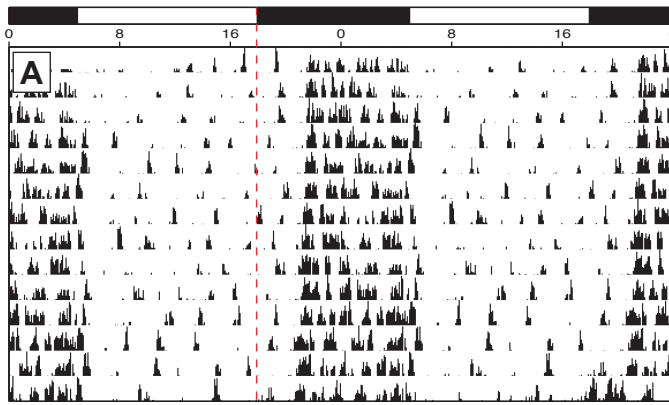
“Photoperiod History Differentially Impacts Reproduction and Immune Function in  
Adult Siberian Hamsters”

*Journal of Biological Rhythms*

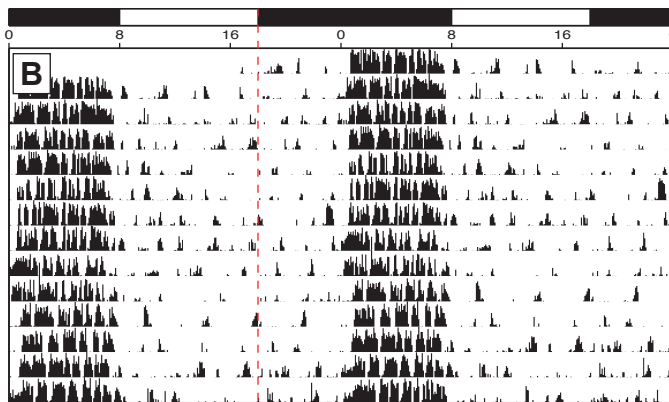
Supplementary Online Figures 1 and 2

*From 15L to...**From 9L to...*

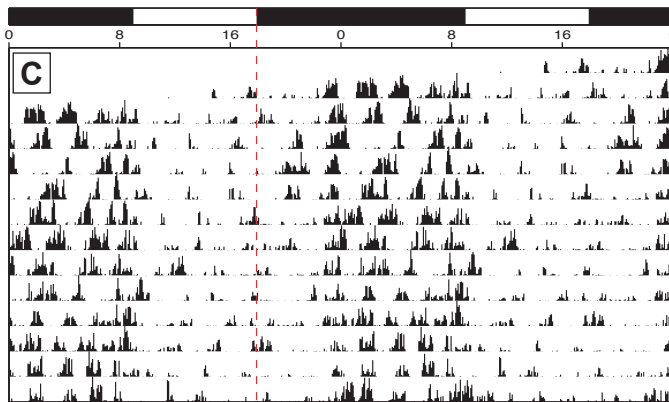
Supplementary Online Material, Figure 1. Representative double-plotted locomotor activity records of adult male Siberian hamsters raised initially in 15L (left column) or 9L (right column) ('initial' photoperiods) and transferred to one of seven different experimental photoperiods ('experimental' photoperiods; indicated along midline of figure): 15L:9D (A, B); 14L:10D (C, D); 13L:11D (E, F); 12L:12D (G, H); 11L:13D (I, J); 10L:14D (K, L); 9L:15D (M, N). Data were collected over a 10-14 day interval following establishment of steady-state entrainment (>3 weeks post-transfer). Clock time (C.S.T.) is indicated along the horizontal axis along the top of each actogram, and white and shaded bars above each actogram illustrate the lighting conditions in each photoperiod.



Animal: 22D  
 Channel: 101  
 Initial/Experimental: 15L / 13L  
 Alpha (group mean): 8.6 h (11.2 h)  
 Phase angle (group mean): - 2.9 h ( $\pm$  0.0 h)



Animal: 17D  
 Channel: 67  
 Initial/Experimental: 15L / 10L  
 Alpha (group mean): 7.0 h (13.0 h)  
 Phase angle (group mean): - 6.5 h (- 0.3 h)



Animal: 27D  
 Channel: 4  
 Initial/Experimental: 15L / 9L  
 Alpha (group mean): 10.4 h (15.2 h)  
 Phase angle (group mean): - 4.8 h (- 0.2 h)

Supplementary Online Material, Figure 2. Representative double-plotted locomotor activity records of three hamsters that were determined to be circadian 'nonresponders' ( $\alpha > 2$  S.D. from the population mean  $\alpha$  for a given photoperiod) to experimental photoperiods of 13L (A), 10L (B), and 9L (C). Experimental treatments and figure conventions as described in Supplementary Online Material, Fig. 1. Note large negative phase angles of entrainment relative to the onset of darkness (dashed vertical line) and compressed as in nonresponders.