

Supplementary Materials for  
**Synthetic gene circuits for preventing disruption of the circadian clock due to interleukin-1–induced inflammation**

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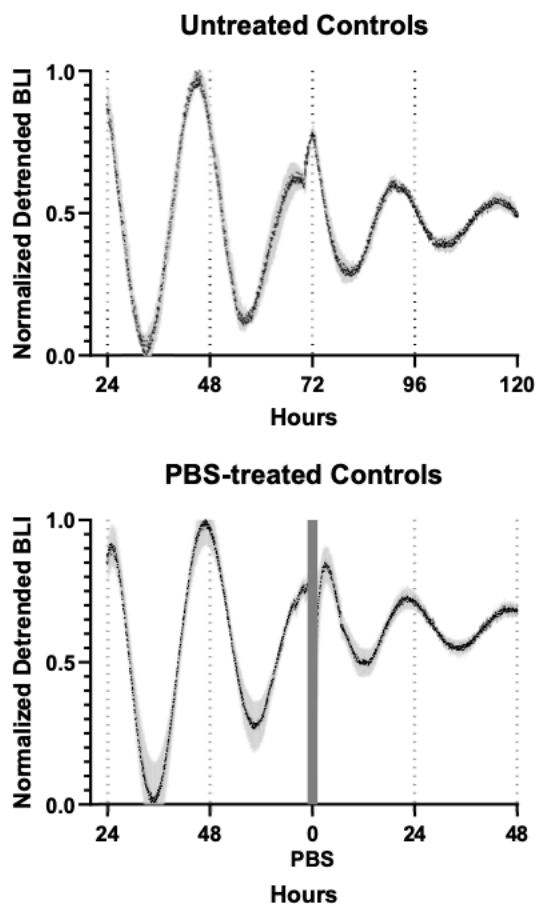
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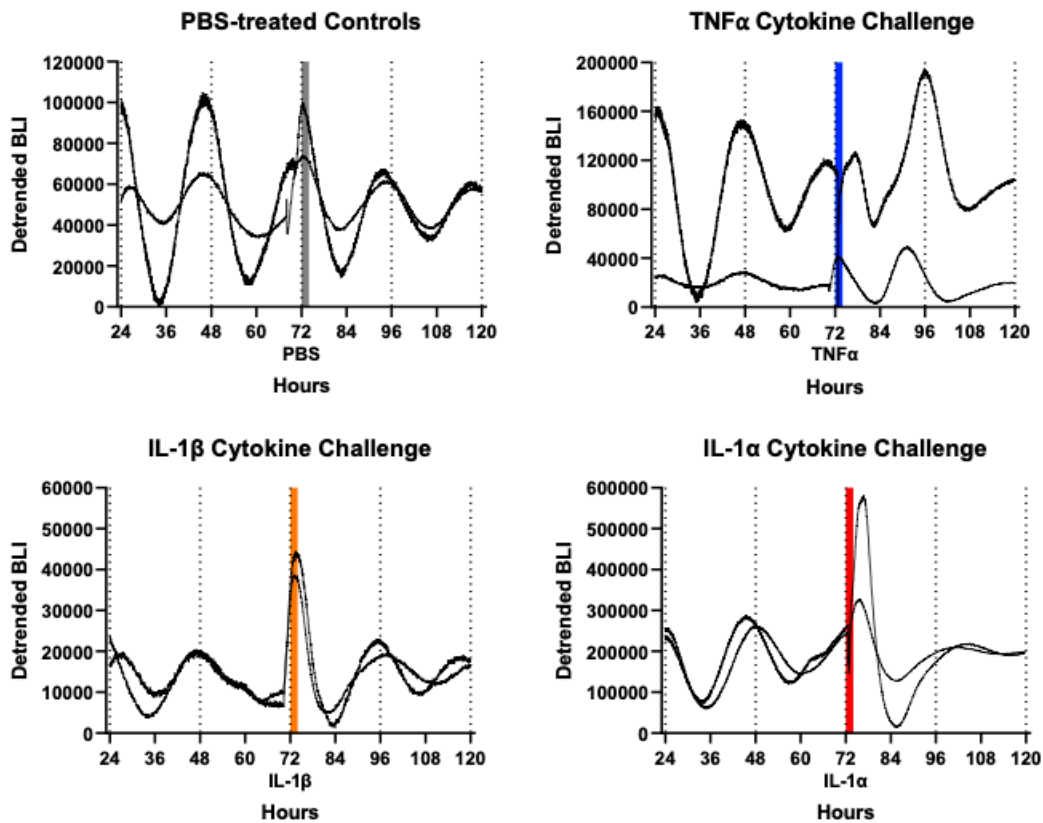
Figs. S1 and S2

## Supplemental Figure 1.



**Supplemental Figure 1.** PBS-treated control pellets exhibit a daily decrease in amplitude nearly identical to unperturbed pellets over 120h of recording.

## Supplemental Figure 2.



**Supplemental Figure 2.** Per2 expression recorded from two representative cultures of chondrocyte pellets for 3 days before and after treatment. Pellets treated with IL-1 $\alpha$ , but not vehicle, TNF $\alpha$ , or IL-1 $\beta$ , showed dramatic loss of circadian gene expression. We present the average traces normalized to the maximum bioluminescence of each culture in Figures 3 and 4 and report amplitude and period from measurements of the raw traces.