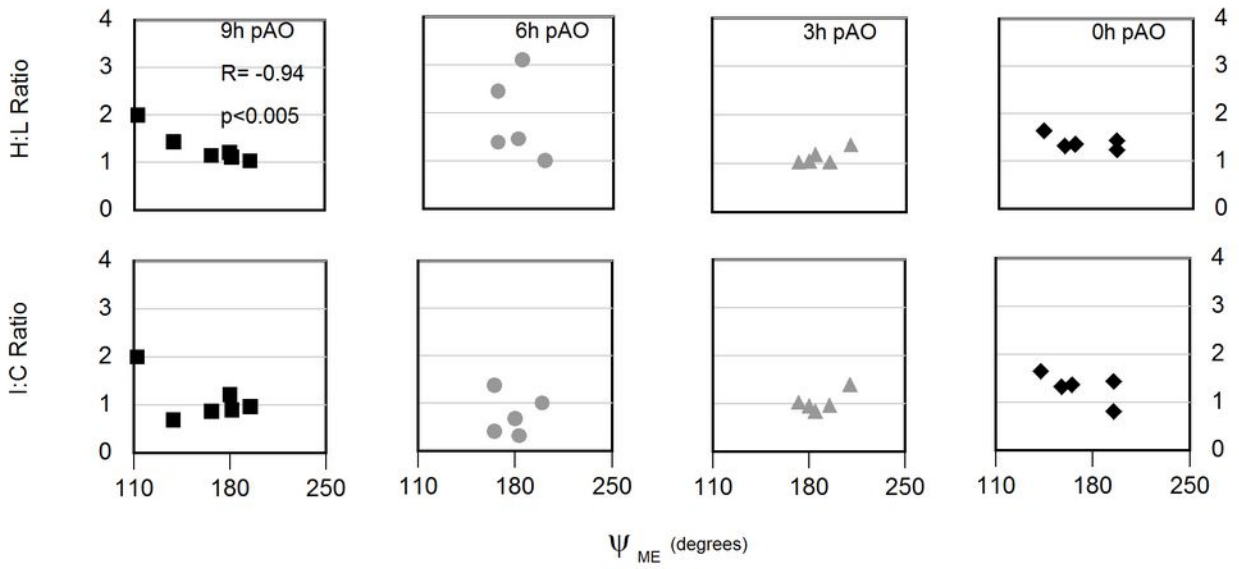
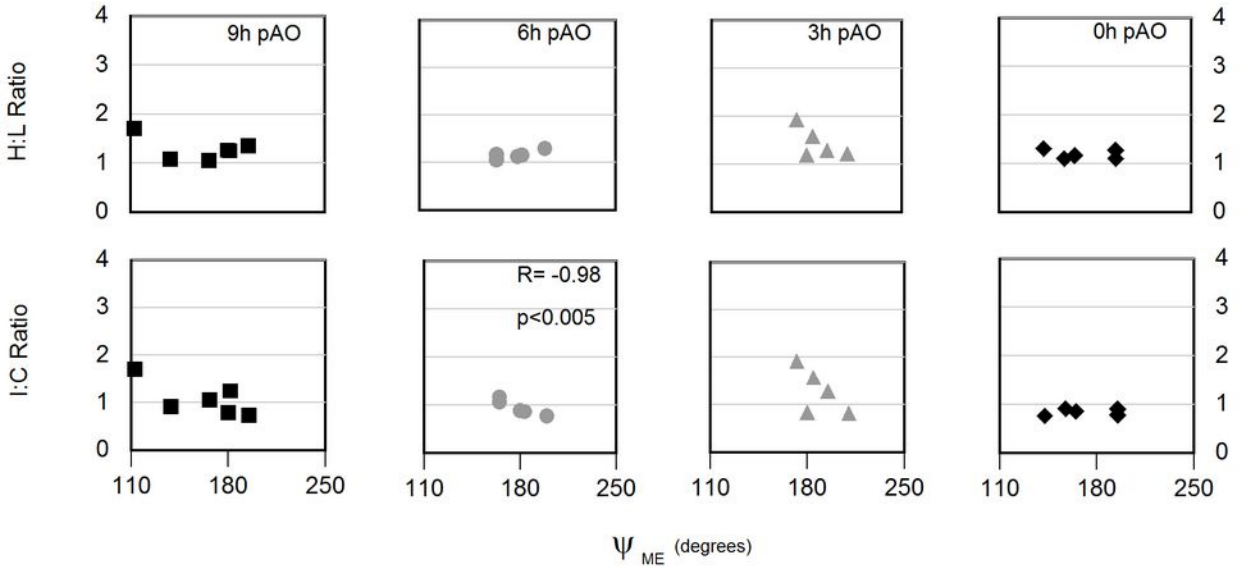


A. Relationship between Per1 asymmetry in lung and ψ_{ME} in experimental data



B. Relationship between Per2 asymmetry in kidney and ψ_{ME} in experimental data



1 Supplement Figure 1. Relative expression (mean \pm SEM) of *haPer1* (black bars), *haPer2*
2 (*grey bars*) and *haBmal1* (*white bars*) in the lung (A), muscle (B), liver (C) and kidney
3 (D). In hamsters that split in LL, messenger RNA values from the left and right side of
4 each peripheral organ were averaged for each individual before group means were
5 calculated for each phase (pAO). Gene expression was assessed by qrtPCR and
6 normalized to GAPDH (*see methods*). Statistical significance: * p<0.05 vs. unsplit
7 control, ** p<0.05 vs. 3h pAO, † p<0.05 vs. 0h pAO.

8

9 Supplement Figure 2. Relative gene expression (mean \pm SEM) averaged for the left and
10 right organs from split and unsplit animals killed at 3h pAO. Levels of *haPer1* (black
11 bars), *haPer2* (*grey bars*) and *haBmal1* (*white bars*) mRNA in the lung (A), muscle (B),
12 liver (C) and kidney (D) are illustrated. * p<0.05 vs. unsplit control.

13

14 Supplement Figure 3. H:L (*top row*) and I:C (*bottom row*) ratios of (A) relative *haPer1*
15 expression in lung and (B) relative *haPer2* expression in kidney plotted as a function of
16 Ψ_{ME} Spearman's correlation (R) and p values are indicated where statistical significance
17 was observed.

18