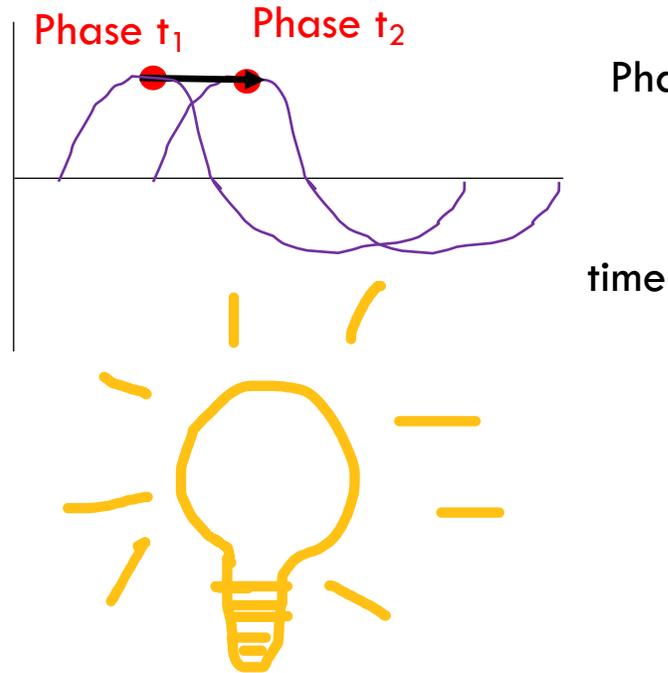
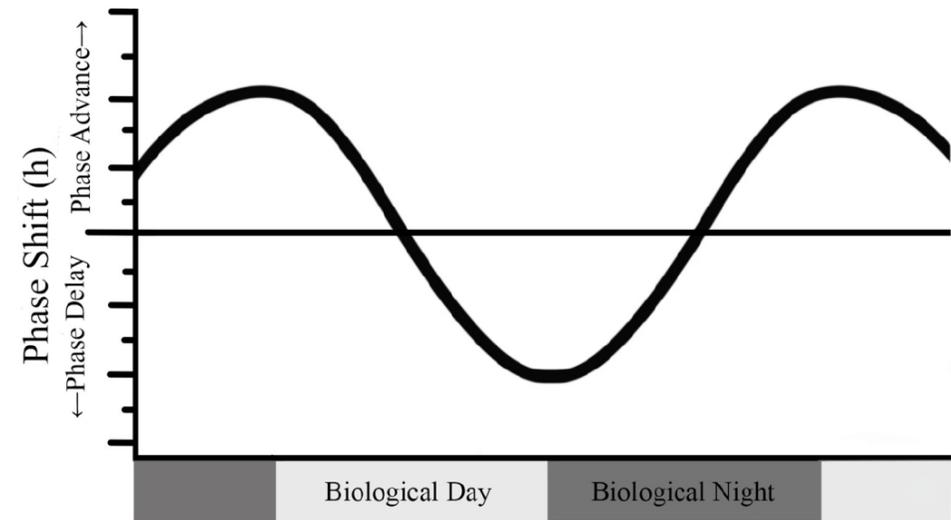


What is considered a circadian phase shift?



Phase shift = difference between two phases



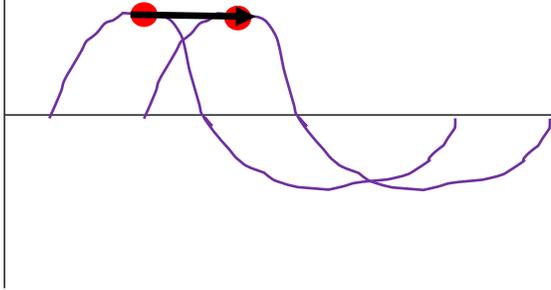
DrCelineVetter



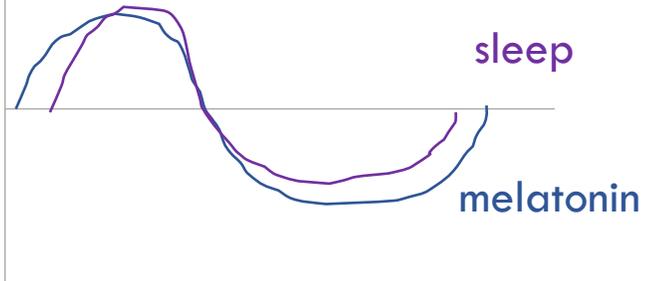
celine.vetter@colorado.edu

What is circadian disruption?

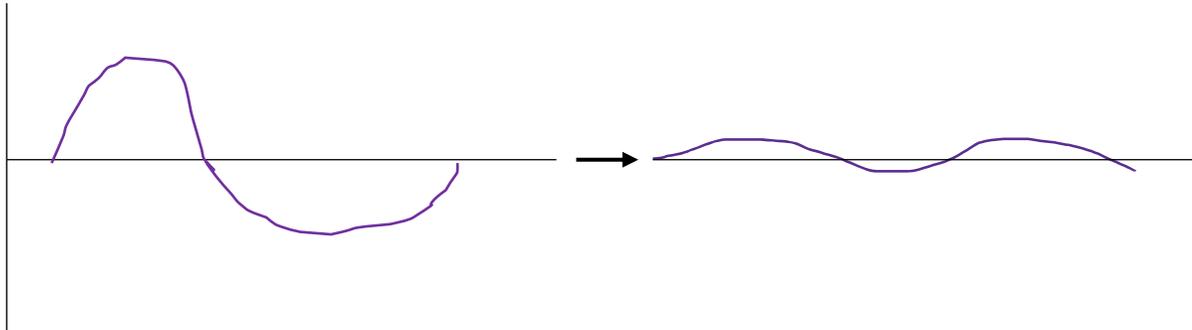
Repeated phase shifts



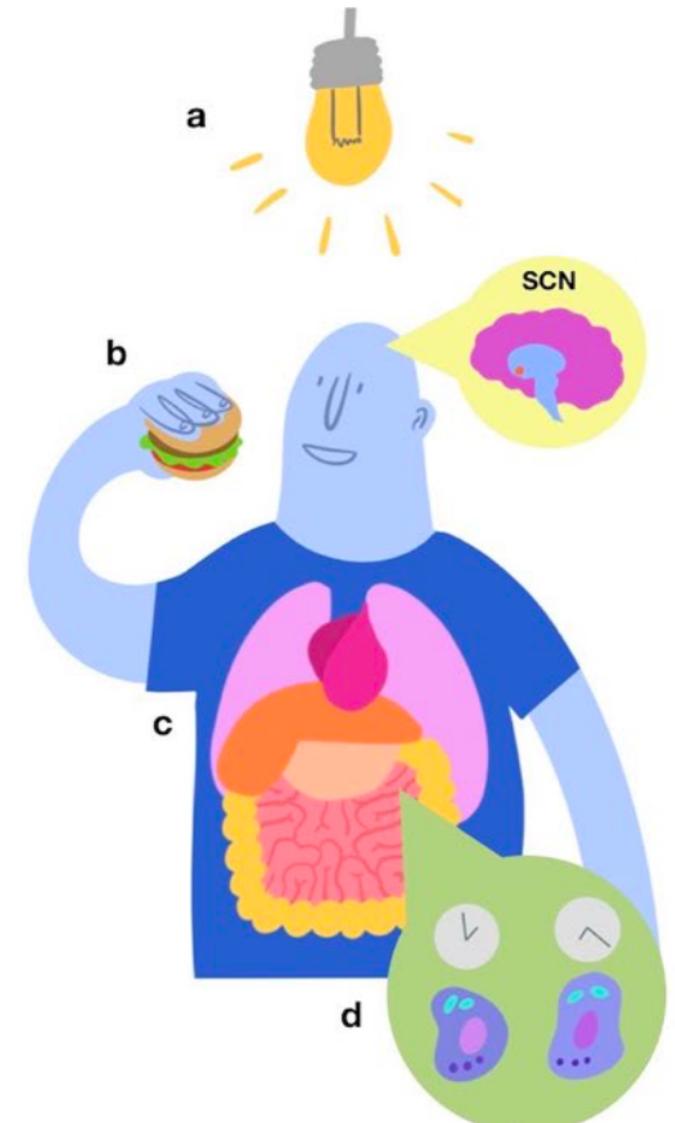
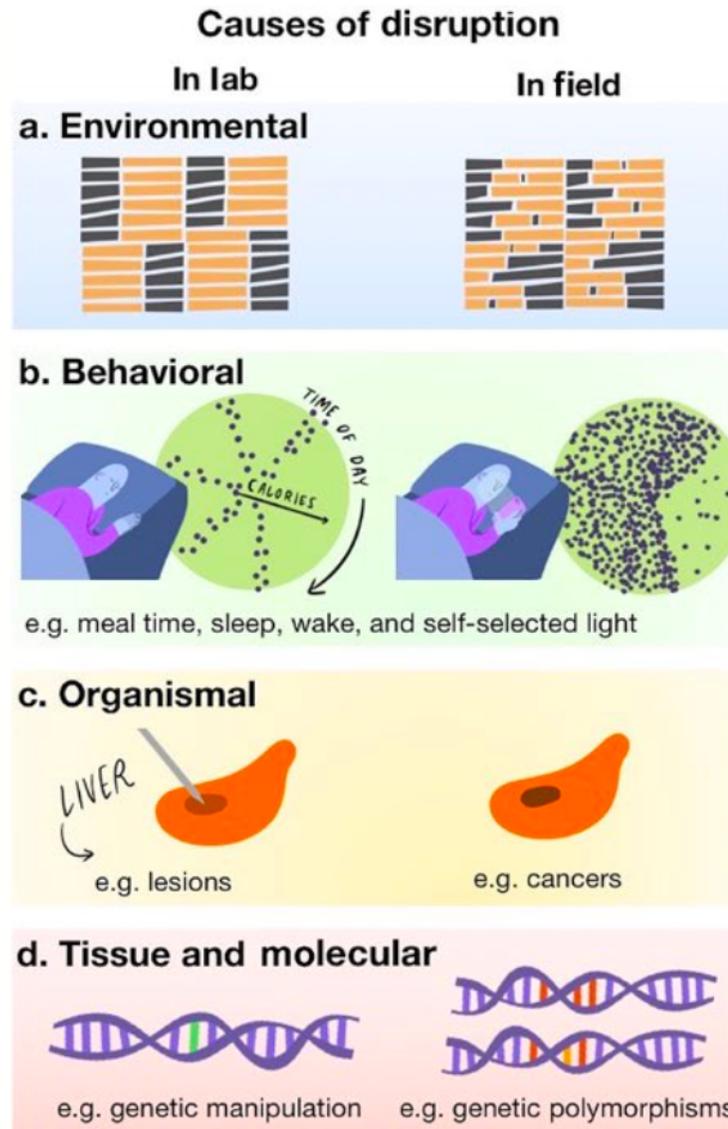
Loss of phase relationship



Loss of rhythmicity and/or dampening of amplitude



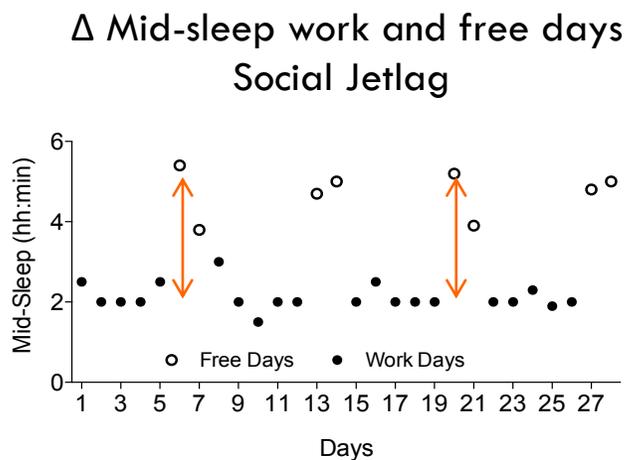
What is circadian disruption?



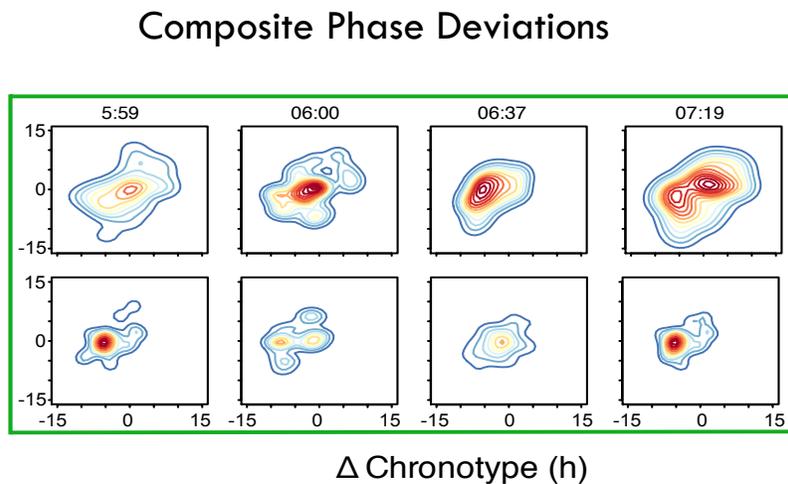
Environment- and behavior-based proxies for circadian misalignment



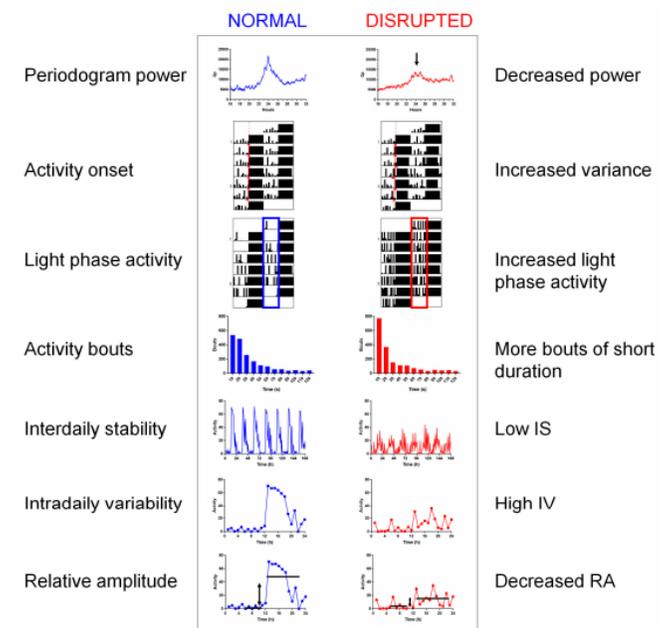
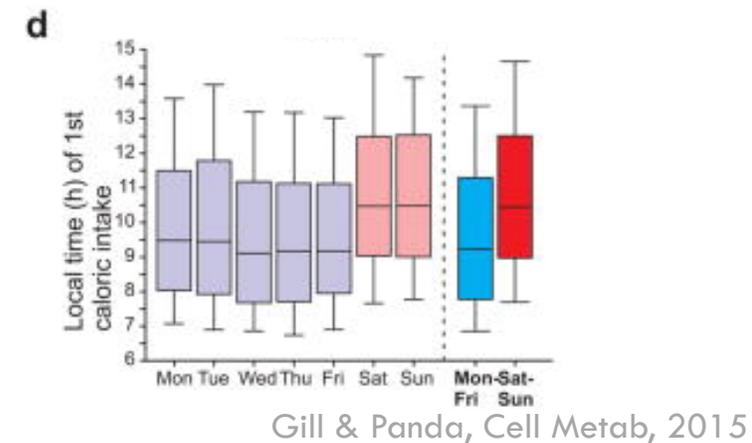
Shift Work, Position in Time Zone, DST...



Wittmann et al., 2006
Roenneberg et al., 2019



Fischer et al., Sci Rep, 2018



Brown et al., Biology, 2019