

Your circadian rhythm is a “body clock” that controls 24-hour cycles and is crucial to obtaining regular and restful sleep. Over the course of evolution, input to this system was sunlight, but in modern society we are exposed to artificial light sources that differ in intensity, color, and timing compared to natural light. How circadian rhythms are affected by these aspects of artificial light is not fully understood, especially how different wavelengths (colors) of light can impact the timing of the clock. I will be travelling to the Université Claude Bernard in Lyon to collaborate with experts in visual processing and circadian rhythms to develop and evaluate techniques that measure the impact color has on disrupting circadian rhythms. This knowledge has important applications including optimizing both the design of screen technology as well as home and workplace lighting. Such research may also allow the development of color-based light interventions that restore dysfunctional circadian rhythms.