



Light & Circadian Environments 1H - 1LU AIA #AX0410

Promoting health & wellness through circadian-supportive environments, from classrooms to offices to healthcare facilities

Creating circadian-supportive environments, where each person's 24-hour needs differ can be a challenge - we are now equipped with enough knowledge and tools to tailor solutions to specific populations.

Can circadian-effective lighting help promote health and wellbeing where we learn and where we work?

Architects and lighting designers, whether in pursuit of knowledge as standard practice or seeking to achieve WELL points for their clients, often ask for guidance in understanding the issues regarding circadian light.

What are important factors to consider and what tools are available?

This presentation addresses basic circadian lighting principles and the consequences of circadian disruption, as well as current circadian metrics and lighting technologies at our disposal to facilitate the design of lighting that supports 24-hour schedules and spaces - from school-age children to adults.

What you'll learn

- How to recognize that there is a difference among people, their sensitivity, and their response to light depending on their age, location, profession, and schedules.
- Understand the different ways the visual system and non-visual system process light, and the impact on our 24-hour biological processes.
- Explore current circadian metrics, what they indicate and the tools we can use to calculate them: circadian stimulus (CS), melanopic to photopic (M/P) ratio, equivalent melanopic lux (EML); as well as how they achieve points under the Circadian Lighting Design Category in WELL.
- Compare lighting techniques and technologies that enable the creation of circadian-supportive lighting in educational, office, and healthcare environments; many LED systems can get you there - it's a matter of knowing the basic elements required and matching desired outcome to application.

