ICFO Colloquium Series - The direct effects of light: more than just blue light

MARIANA FIGUEIRO

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12:00 to 13:00
ICFO Auditorium

BIO:

Mariana G. Figueiro, Ph.D., is a Mount Sinai Professor of Light and Health Research at the Department of Population Health Science and Policy at the Icahn School of Medicine at Mount Sinai. She is also the Director of the Light and Health Research Center (LHRC) at Mount Sinai and Professor. Dr. Figueiro is well known for her research on the effects of light on human health, circadian photobiology, and lighting for older adults. In 2013, she was elected Fellow of the Illuminating Engineering Society. She is the author of more than 150 scientific articles in her field of research, and her research is regularly featured in national media, including a TEDMED talk in 2014.

ABSTRACT:

Exposure to light that is rich in short-wavelength (or "blue") content is maximally effective for stimulating the circadian system leads to physiological responses like suppression of the body's melatonin levels and changes to the body's circadian rhythm. Manufacturers have responded to this 25-year-old scientific discovery with tunable lighting systems purporting to promote circadian entrainment and associated benefits like better health and general well-being. However, lighting for the circadian system doesn't end with considerations of spectrum. This course begins with a summary of the research behind light's acute (i.e., immediate and direct) effects on human physiology, covering subjects including biomarkers (e.g., melatonin), alertness, and task performance. We then explore applications that promoting alertness and task performance both day and night are important and discuss how to implement solutions that will increase alertness while reducing circadian disruption.
Hosted by: Prof. Dr. Turgut Durduran

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