

**Recent research** has shown that:

Retinal ganglion cells, unlike other retinal ganglion cells, are intrinsically photosensitive due to the presence of melanopsin

They constitute a **third class of photoreceptors**, in addition to rod and cone cells

Confirming in humans this recent remarkable discovery of a **novel photoreceptor** system in the **mammalian eye**

**They play a major role in synchronizing circadian rhythms** to the 24-hour light/dark cycle, providing primarily length-of-day and length-of-night information

## **YOUR EYES GOVERN YOUR SLEEP**

**Low-energy light bulbs (LED), TV and computer screens, game consoles and smartphones play havoc with your biological clock**

Shortwave blue light stimulating the ipRGC cells in the retina express the pigment melanopsin, which acts through the retinohypothalamic tract to suppress the secretion of melatonin (the sleep hormone) by the pineal gland.

**This interferes with the ability to fall and stay asleep**