

EMF CAUSES A CASCADE OF BIO-EFFECTS RELATED TO ALTERATIONS OF MELATONIN RELEASE. TO UNDERSTAND THE SIGNIFICANCE OF THIS, WE NEED TO APPRECIATE WHAT MELATONIN DOES IN THE BODY, THE EFFECT OF EMF ON MELATONIN AND THE INTERACTION BETWEEN EMF, ALTERED MELATONIN AND LIVING TISUE.

WE KNOW MELATONIN IS RELEASED IN RESPONSE TO DECREASING ENVIRONMENTAL LIGHT; MORE LIGHT AT NIGHT MEANS LESS MELATONIN IS RELEASED. STUDIES SHOW THAT EMF AFFECTS MELATONIN IN A SIMILAR WAY. BECAUSE MELATONIN PROTECTS US AGAINST MANY OF THE KNOWN ADVERSE EFFECTS OF EMF, WE LOSE SOME OF THIS PROTECTION AT A TIME WHEN WE NEED IT THE MOST. THE CONSEQUENCES ARE SYSTEM-WIDE.

THIS MAP INDEXES OTHER MAPS AT WWW.OSCILLATORIUM.COM WHICH DISCUSS MELATONIN RELEASE AND FUNCTION IN RELATIONSHIP TO ARTIFICIAL NON-IONIZING EMF EXPOSURES.

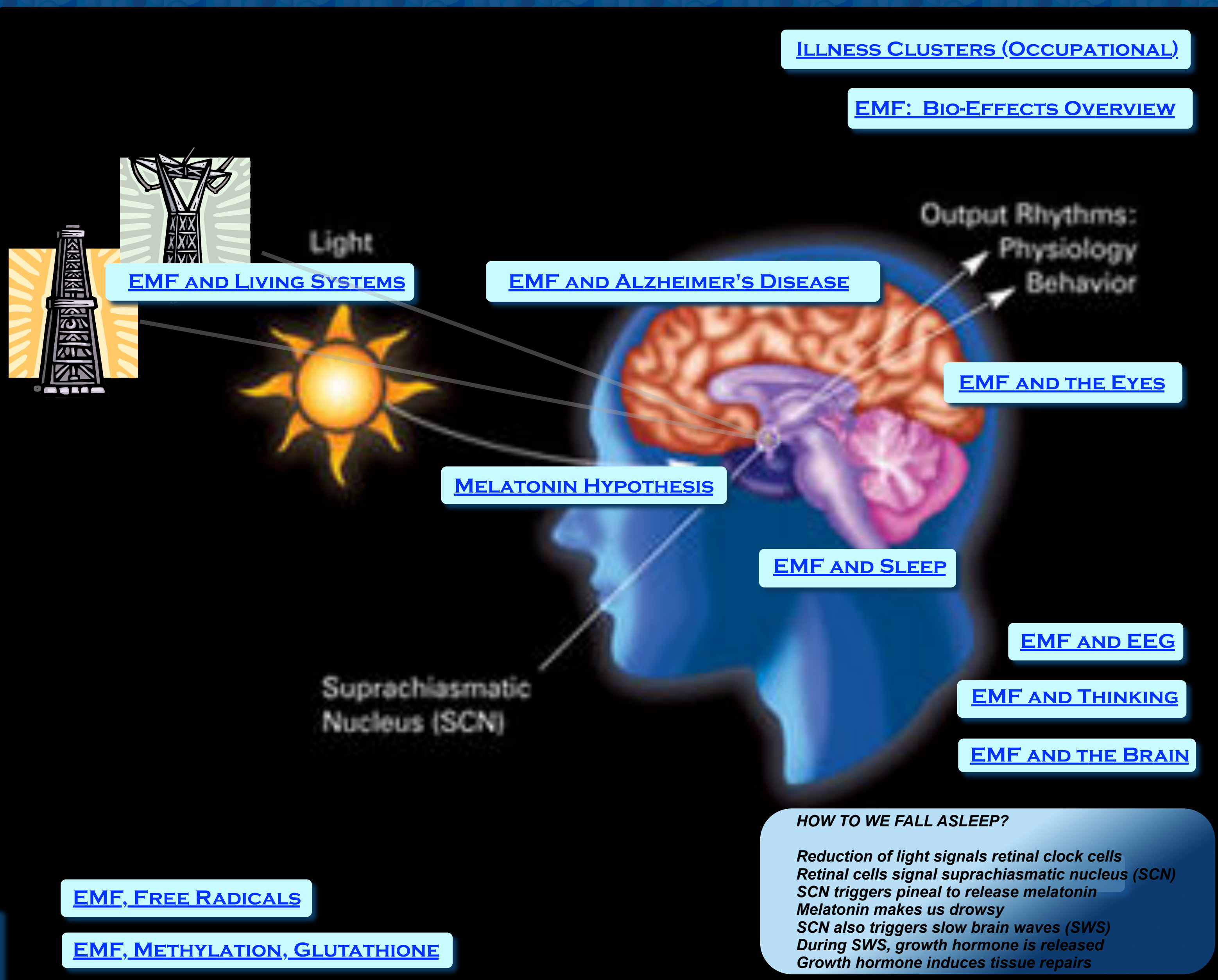
WHAT DOES MELATONIN DO?
Assists sleep
Assists memory
Protects neurons and cells from damage
Scavenges free radicals
Regulates glutathione, other antioxidants
Protects against beta-amyloid deposition
Reduces "sundowning" in AD
Regulates biological clock

HOW DOES EMF AFFECT MELATONIN?
Decreases release

HOW DOES REDUCED MELATONIN MAGNIFY EMF BIO-EFFECTS?
Increased free radical damage
Reduced methylation
Increased inflammation
Decreased sleep, decreased rest
Increased amyloid deposits, AD
Increased cancer risk
Increased immune stress

MAP INDEX:
TOPICS PERTINENT
TO
MELATONIN FUNCTIONS
AND
EMF

Home: Oscillatorium
Newest version [this map](#)
Date of this update: 01-02-16



[ILLNESS CLUSTERS \(OCCUPATIONAL\)](#)

[EMF: BIO-EFFECTS OVERVIEW](#)

[EMF AND LIVING SYSTEMS](#)

[EMF AND ALZHEIMER'S DISEASE](#)

[EMF AND THE EYES](#)

[MELATONIN HYPOTHESIS](#)

[EMF AND SLEEP](#)

[EMF AND EEG](#)

[EMF AND THINKING](#)

[EMF AND THE BRAIN](#)

[EMF, FREE RADICALS](#)

[EMF, METHYLATION, GLUTATHIONE](#)

HOW TO WE FALL ASLEEP?
Reduction of light signals retinal clock cells
Retinal cells signal suprachiasmatic nucleus (SCN)
SCN triggers pineal to release melatonin
Melatonin makes us drowsy
SCN also triggers slow brain waves (SWS)
During SWS, growth hormone is released
Growth hormone induces tissue repairs