

Sleep in healthy aging and dementia

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ADRC Participant Appreciation Day
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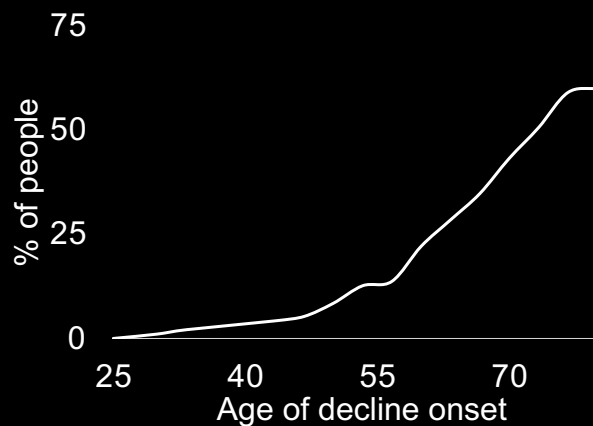
Department of Neurology & Neurological Sciences
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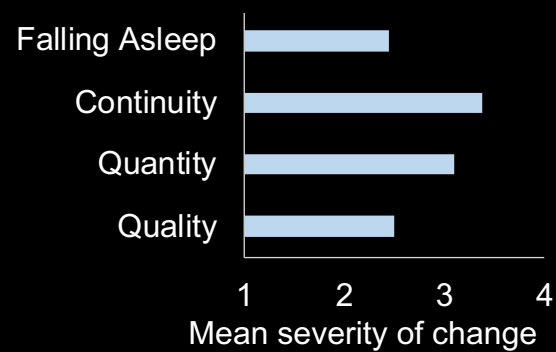
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How does sleep change as we get older?

When did your sleep get worse?

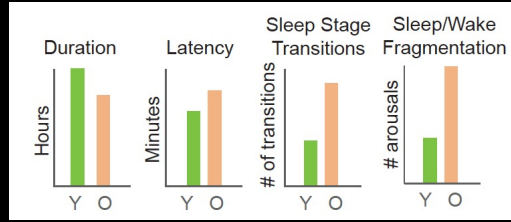


What aspects of your sleep got worse?

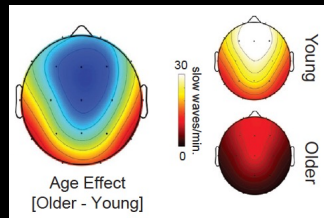
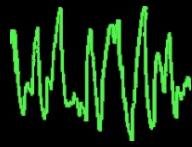


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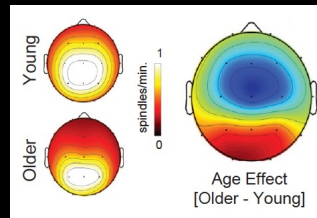
How does sleep change as we get older?



Sleep Architecture



Slow Wave Density



Spindle Density

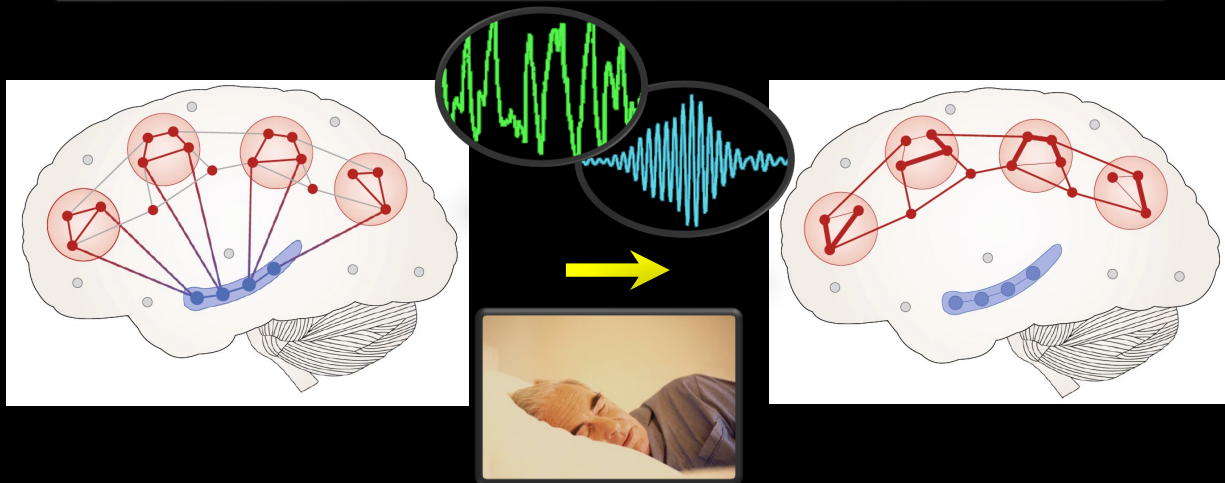


Mander, Winer, & Walker (2017) *Neuron*



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Sleep strengthens memory

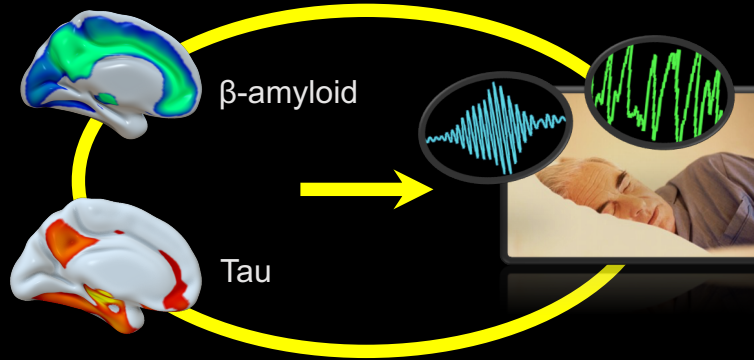


Klinzing, Niethard, & Born (2019) *Nature Neuroscience*



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Sleep and Alzheimer's disease

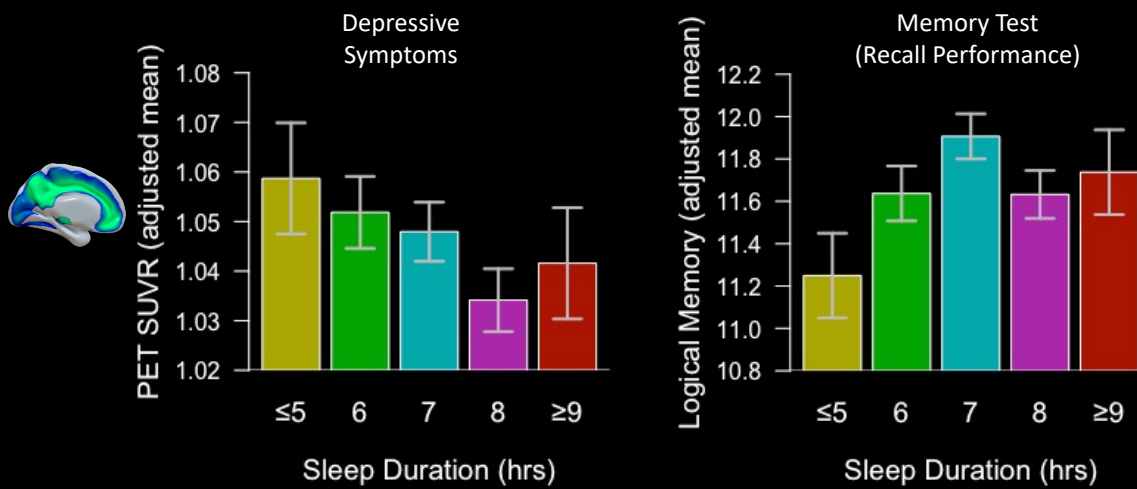


A "vicious cycle"



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Short sleep, amyloid and memory decline



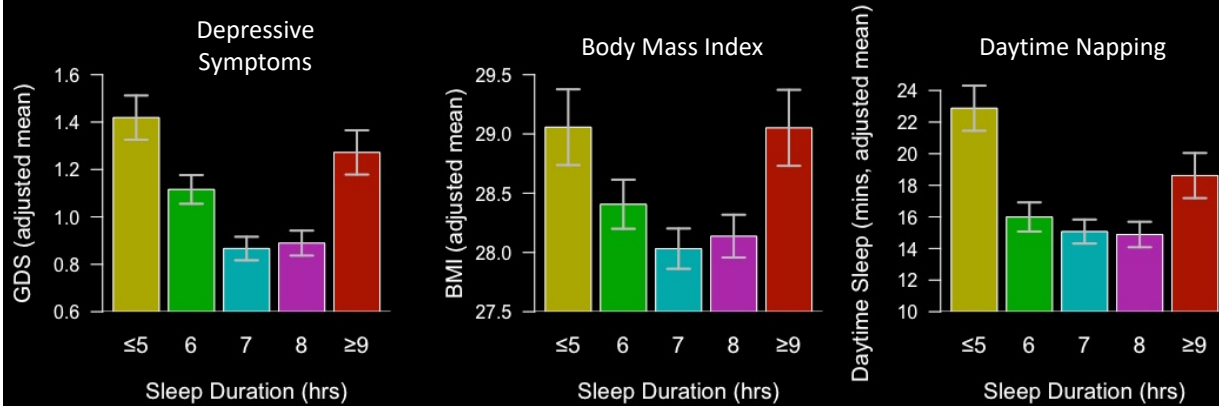
Winer et al. (2021) *JAMA Neurology*



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Sleep duration and lifestyle factors

Means and std. error adjusted for age, sex, education, self-identified race and ethnicity, APOE



Winer et al. (2021) JAMA Neurology



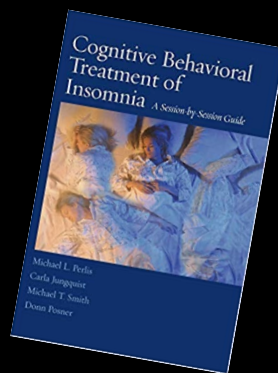
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Interventions: Healthy sleep, healthy aging

Sleep apnea treatment



Behavioral therapy

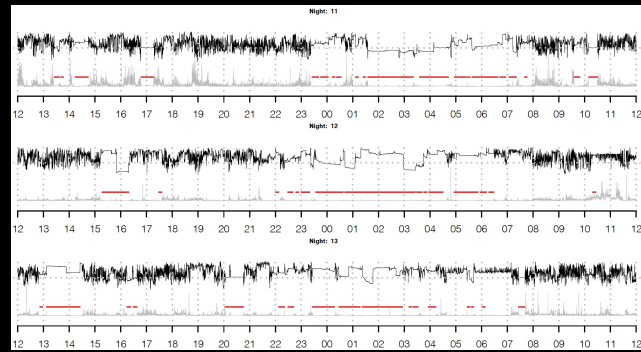


Sleep enhancement ?



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Actigraphy: sleep in real life



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Thank You!

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