

Enightune

Principal Investigator: Prof LAI, Cora S. W., Prof. HO, Joshua W.K., Prof. CHAN Koon Ho
AI-powered system for sleep-targeted auditory gamma entrainment as **non-invasive intervention** of **Alzheimer's disease**

TECHNOLOGY

Gamma entrainment is a proven technique as non-invasive intervention of Alzheimer's disease

However the effectiveness of gamma entrainment delivery is questionable.

In our research we discovered that conducting auditory gamma entrainment in certain NREM sleep stages shows significant effect in Alzheimer's progression.

Enightune is an invention translating this neuroscience research into the potential Alzheimer's disease rescue.



Enightune

Non-invasive

- Intervene only by playing tunes in your ear
- Sleep monitoring to preserve sleep quality

Reduce Plaque in brain

- Overnight Monitor your EEG
- Alleviate the progression of Alzheimer's disease

KEY ADVANTAGE

AI-POWERED

Potential benefits on sleep architecture modulation, cognitive function improvement, and amyloid plaque clearance.

Monitor your sleep, Intervene by gamma tunes

Enightune band

- Overnight Monitor your EEG
- Real time gamma tunes in critical sleep stages

Learn from your data, Help you sleep better

Enightune App

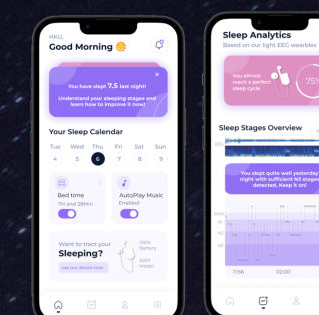
- Sleep log with physiological data
- brain rhythm detection analysis

EEG BAND



Compact, light-weight head band securing your sleep

ENIGHTTUNE APP



Real time closed loop monitoring

EARBUD



Play gamma tunes in critical sleep stage

Specific:

Sleep-stage targeted auditory feedback

Safe & Personalized:

Non-invasive auditory stimulation in sleep to induce gamma frequency

All in one:

Multimodal physiological data collection support

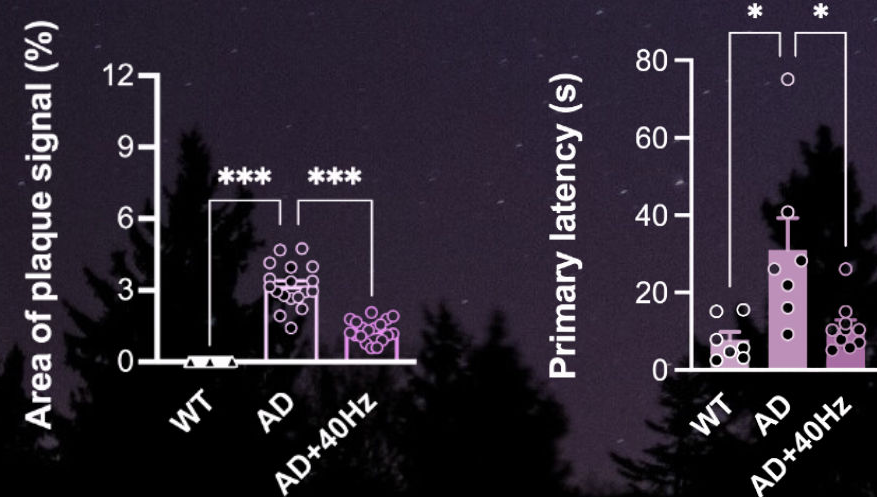
Potential application on other **neurological & psychiatric disorders** with gamma oscillation & sleep deficits

Enightune's Future

Including Parkinson's diseases, Schizophrenia, Autism, ADHD, Sleep apnea.

STAGE OF DEVELOPMENT

Enightune shown excellent evidence in relevant animal models to clear plaque in brain.



We have developed a prototype that is tailored for human overnight sleep. Now calling for funding to proceed for clinical validation and product development

OPPORTUNITIES

Once validated in a large scale clinical study, Enightune can be deployed easily into hospital, elderly home and general publics.

Enightune formed strategical partnership with Gleneagles Hospital Hong Kong transferring scientific research facing the ever growing AD market.

Alzheimer's disease market (CAGR):

21.8%
global market

lifetime cost of care of severe Alzheimer:

\$187,000
per patient in HK

INTELLECTUAL PROPERTY

Patent applied by HKU TTO Ref : IP01779

Hong Kong short term patent: Sleep-targeted gamma entrainment system for Alzheimer's disease plaque clearance

一種睡眠靶向伽瑪夾帶系統及其控制方法

CONTACT

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