

Transcranial magnetic resonance guided focused ultrasound

[Transcranial focused ultrasound](#) (tFUS) at low intensities has been reported to directly evoke responses and reversibly inhibit function in the central nervous system. While some doubt has been cast on the ability of [ultrasound](#) to directly evoke neuronal responses, spatially-restricted [transcranial ultrasound](#) has demonstrated consistent, inhibitory effects

tFUS predominantly causes neuroinhibition and the most primary biophysical mechanism is the thermal effect of [focused ultrasound](#) ¹⁾.

Indications

see [Transcranial magnetic resonance guided focused ultrasound indications](#).

1)

Darrow DP, O'Brien P, Richner TJ, Netoff TI, Ebbini ES. Reversible neuroinhibition by focused ultrasound is mediated by a thermal mechanism. *Brain Stimul.* 2019 Jul 23. pii: S1935-861X(19)30299-2. doi: 10.1016/j.brs.2019.07.015. [Epub ahead of print] PubMed PMID: 31377096.

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