Classical neuromodulation consists of applying electrical or magnetic stimuli to the nervous system to modulate ongoing activity and connectivity. However, recently, an exciting novel neuromodulation technique was developed in which stimulation of the vagus nerve was paired with simultaneous presentation of tones, demonstrating that it reverses a tinnitus percept in noise-exposed rats.

Dorsal root ganglion stimulation.

Variations in targeting techniques of focused ultrasound for use in neuromodulation [1)]

Three neuromodulation therapies, all using implanted device and electrodes, have been approved to treat adults with drug-resistant focal epilepsy, namely, the vagus nerve stimulation for drug-resistant epilepsy. in 1995, deep brain stimulation of the anterior nucleus of the thalamus (ANT-DBS) in 2018 (2010 in Europe), and responsive neurostimulation (RNS) in 2014.

1)
Spivak NM, Kuhn TP. Variations in targeting techniques of focused ultrasound for use in neuromodulation. Brain Stimul. 2019 Jul 26. pii: S1935-861X(19)30305-5. doi: 10.1016/j.brs.2019.07.021. [Epub ahead of print] PubMed PMID: 31377098.