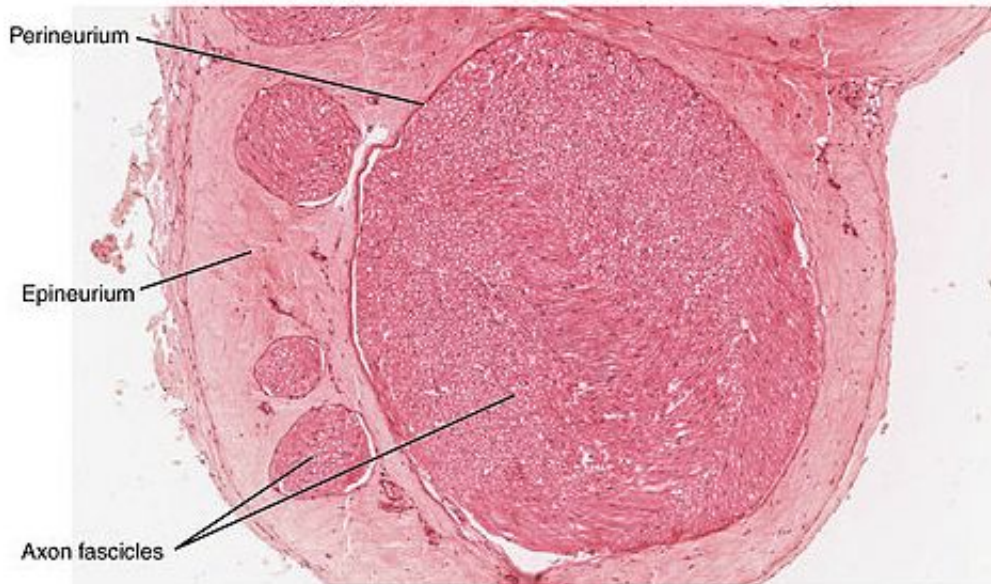


Video: Scientists visualize pain's pathway

October 24 2019, by Bill Hathaway



Cross-section of a nerve. Credit: OpenStax College/Wikipedia

The lab of Stephen Waxman, Bridget M. Flaherty Professor of Neurology and of Neuroscience, has identified the key role of sodium channels arrayed on nerve cells in experience of pain.

In a new paper published in *Science Advances*, the Yale team led by postdoctoral associate Liz Akin and senior research scientist Sulayman Dib-Hajj was able to visualize at the level of a single molecule how sodium channels and [electrical impulses](#) they generate are distributed, often at great distances, along nerve cells.

The research advances the lab's efforts to lay the groundwork for a [new generation](#) of non-addictive pain killers.

More information: Elizabeth J. Akin et al. Building sensory axons: Delivery and distribution of NaV1.7 channels and effects of inflammatory mediators, *Science Advances* (2019). [DOI: 10.1126/sciadv.aax4755](#)

Provided by Yale University

Citation: Video: Scientists visualize pain's pathway (2019, October 24) retrieved 20 April 2024 from <https://medicalxpress.com/news/2019-10-video-scientists-visualize-pain-pathway.html>

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