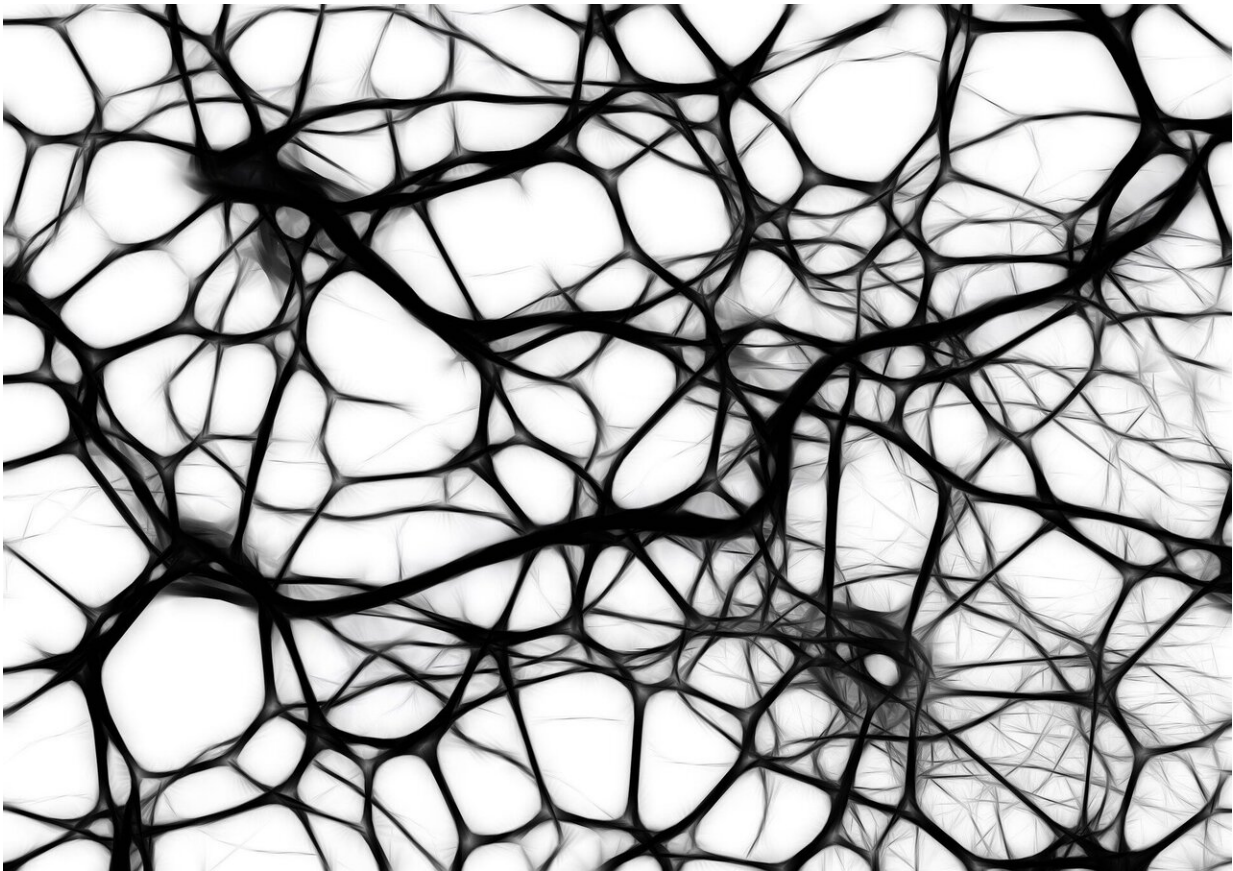


Research team develops new technology for studying brown fat

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Credit: CC0 Public Domain

Brown fat, also known as brown adipose tissue (BAT), is a special type of fat that helps maintain body temperature. Importantly, brown fat is a

biological fuel linked to metabolic rate and fat storage. In a recent publication, Dr. Zhiqiang Lin, Assistant Professor at the Masonic Medical Research Institute (MMRI) and senior author of the manuscript, successfully developed a new way to enrich isolation of brown fat cells for use in his biochemistry studies. "When faced with a scientific setback, we simply start tackling potential hurdles," said Dr. Lin. One of these was having a need to develop a better way to isolate these fat cells.

BAT is comprised of multiple [cell types](#), which makes it difficult to isolate brown fat cells specifically without contamination by other cell populations in the tissue. Prior to Dr. Lin's research, there was no efficient method to do this. "This technique will allow my lab, and the labs of other investigators, to more clearly study the relationship between [brown fat](#) cells and other cell types in BAT" said Dr. Lin.

The publication in *JoVE* also creates videos of the experimental technique, to help educate the [scientific community](#) on the process (JoVE.com). A team from *JoVE* visited the Institute to record a demonstration of the technique by Steve Negron, a Research Assistant in the Lin Lab and first author of the manuscript. Additional authors on the manuscript include Dr. Bing Xu, Postdoctoral Fellow in the Kontaridis Lab at MMRI. The manuscript titled, "Isolating Brown Adipocytes from Murine Interscapular Brown Adipose Tissue for Gene and Protein Expression Analysis," and corresponding video can be found at [DOI: 10.3791/62332](#).

More information: Steven G. Negron et al, Isolating Brown Adipocytes from Murine Interscapular Brown Adipose Tissue for Gene and Protein Expression Analysis, *Journal of Visualized Experiments* (2021). [DOI: 10.3791/62332](#)

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