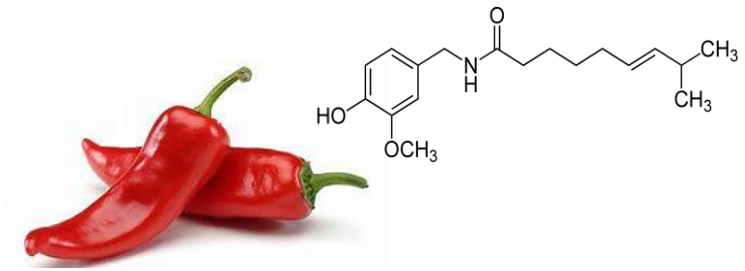
PLENARY TALK (virtual):

From Peppers to Peppermints: Natural Products as Probes of the Pain Pathway

Nobel Laureate Dr. David Julius
University of California San Francisco, USA



Dr. David Julius used capsaicin, the active component in chili peppers, to identify the nerve sensors that allow the skin to respond to heat and pain.

Dr. David Julius was awarded the 2021 Nobel Prize in Physiology and Medicine jointly with Ardem Patapoutian for their discoveries of receptors for temperature and touch. Dr. Julius discovered molecular mechanisms of pain sensation and heat, including the characterization of the receptors that detect capsaicin, menthol, and temperature.

Dr. Julius earned his undergraduate degree from Massachusetts Institute of Technology and attained his doctorate from University of California, Berkeley. In 1997, his laboratory at the University of California, San Francisco cloned and characterized the transient receptor potential (TRPV1) channel, which is the receptor that detects capsaicin, the chemical in chili peppers that makes them “hot”. Subsequently, Dr. Julius’s laboratory contributed to the study of nociception by discovering other TRP channels that detect a range of temperatures and chemicals. These discoveries are vital to the development of therapeutics for chronic pain and other conditions.

https://www.ibiology.org/neuroscience/sensory-receptors/