

**UAMS News Bureau**

Office of Communications & Marketing  
4301 West Markham # 890  
Little Rock, AR 72205-7199

[uamshealth.com/news](http://uamshealth.com/news)



**News Release**  
**April 13, 2021**

**Media Contacts:**

Leslie W. Taylor, 501-686-8998  
Wireless phone: 501-951-7260  
[leslie@uams.edu](mailto:leslie@uams.edu)

Yavonda Chase, 501-686-8995  
Wireless phone: 501-416-0354  
[Ycchase@uams.edu](mailto:Ycchase@uams.edu)

**UAMS' Erika Petersen, M.D., Publishes Study Results  
on Treatment for Painful Diabetic Neuropathy in JAMA**

LITTLE ROCK — Results of a randomized clinical trial led by Erika Petersen, M.D., of the University of Arkansas for Medical Sciences (UAMS) on use of a spinal cord stimulation system for patients with refractory painful diabetic neuropathy were [published April 5 in JAMA Neurology](#).

Petersen, a neurosurgeon and professor in the Department of Neurosurgery in the College of Medicine, led the study that found that high-frequency (10kHz) spinal cord stimulation provided significant benefits for painful diabetic neuropathy (PDN) patients who suffered for years with symptoms that are resistant to other treatments.

“The substantial pain relief and improved quality of life sustained over six months demonstrates that this therapy can safely and effectively treat this patient population,” Petersen said. “I’m grateful to my co-investigators and the patients who participated in this study, as the results will have a far-reaching impact on the lives of PDN patients.”

The study of the Senza System devised by Nevro Corp., a global medical device company based in California, is the largest randomized controlled study of spinal cord stimulation treatment conducted for PDN. It compared the high-frequency treatment delivered through the implantable device to conventional medical management for the condition in 216 patients in 18 centers in the United States, including academic centers like UAMS and community pain clinics.

Petersen’s study was supported by the UAMS Translational Research Institute, which is funded by a Clinical and Translational Science Award from the National Institutes of Health’s National Center for Advancing Translational Sciences.

The World Health Organization estimates that 422 million adults have diabetes worldwide. Diabetic peripheral neuropathy is a common complication that presents as pain, numbness, burning or tingling. About 20 percent of patients with diabetes will develop PDN, a progressive, potentially debilitating chronic neuropathic condition.

Current PDN treatments include neuropathic pain medications with limited efficacy and high incidences of adverse effects.

UAMS is the state's only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; hospital; a main campus in Little Rock; a Northwest Arkansas regional campus in Fayetteville; a statewide network of regional campuses; and seven institutes: the Winthrop P. Rockefeller Cancer Institute, Jackson T. Stephens Spine & Neurosciences Institute, Harvey & Bernice Jones Eye Institute, Psychiatric Research Institute, Donald W. Reynolds Institute on Aging, Translational Research Institute and Institute for Digital Health & Innovation. UAMS includes UAMS Health, a statewide health system that encompasses all of UAMS' clinical enterprise including its hospital, regional clinics and clinics it operates or staffs in cooperation with other providers. UAMS is the only adult Level 1 trauma center in the state. *U.S. News & World Report* named UAMS Medical Center the state's Best Hospital; ranked its ear, nose and throat program among the top 50 nationwide; and named six areas as high performing — COPD, colon cancer surgery, heart failure, hip replacement, knee replacement and lung cancer surgery. UAMS has 2,876 students, 898 medical residents and four dental residents. It is the state's largest public employer with more than 10,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children's Hospital, the VA Medical Center and Baptist Health. Visit [www.uams.edu](http://www.uams.edu) or [www.uamshealth.com](http://www.uamshealth.com). Find us on [Facebook](#), [Twitter](#), [YouTube](#) or [Instagram](#).

Like us, we're social:    