



WESTERN NEUROPATHY ASSOCIATION

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- Aerobics Exercise Boosts Cognition In Younger Adults
- WNA Support Groups
- President's Message
- Can the Sun Protect Against Diabetes?
- Your Opportunity To Help With Research Is Here
- Understanding Neuromodulation
- WNA 2019 Annual Conference - Information And Registration
- Diabetes Information
- Diabetes; The Right Steps For A Healthy Life



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# Neuropathy Hope

*Hope through caring, support, research, education, and empowerment*

A newsletter for members of Western Neuropathy Association (WNA)

## AEROBIC EXERCISE BOOSTS COGNITION IN YOUNGER ADULTS

### Benefits Seen In People As Young As 20

By Judy George, Contributing Writer, MedPage Today, January 31, 2019

Aerobic exercise training improved cognition in adults, even in those young and middle-age, a randomized clinical trial<sup>1</sup> found.

Executive function improved significantly in adults ages 20 to 67 years, with older people seeing greater improvements ( $\beta$  0.018 SD/y;  $P=0.028$ ), reported Yaakov Stern, PhD, of Columbia University in New York City, and colleagues, in Neurology.

At age 40, executive function increased by 0.228 SD (95% CI 0.007–0.448); at age 60, it increased by 0.596 SD (95% CI 0.219–0.973).

“Since a difference of 0.5 standard deviations is equivalent to 20 years of age-related difference in performance on these tests, the people who exercised were testing as if they were about 10 years younger at age 40 and about 20 years younger at age 60,” Stern said in a statement.

Most research about exercise and cognition has focused on elderly patients, Stern noted, and those studies that included younger adults were small and lacked a control group.

In this trial, Stern and colleagues randomly assigned 132 sedentary, cognitively intact individuals with below median aerobic capacity to either an aerobic exercise training program or a control program of stretching and core-strengthening exercises for six months. The groups were equally balanced for sex (about 70% women) and age (median age 39 for the aerobic group and 37 for controls), and did not differ at baseline in education, estimated IQ, or any cognitive outcome measures.

All participants worked out at one of five New York City YMCA fitness centers. For the first two weeks, they trained at 55–65% of their maximum heart

rate, gradually increasing intensity so that in weeks five to 26, they exercised at 75% of their maximum heart rate. Participants in the aerobic group chose any form of exercise they wanted, as long as they reached target heart rates. Of the 132 participants, 94 completed the six-month intervention.

At six months, executive function improved significantly in the aerobic exercise group; that effect was moderated by age. After controlling for age and baseline performance, individuals with at least one APOE e4 allele showed less improvement in executive function with aerobic exercise ( $\beta$  0.5129, 95% CI 0.0381–0.988;  $P=0.0346$ ). Processing speed, language, attention, or episodic memory did not improve for participants of any age.

Aerobic exercise training also was associated with significantly increased cortical thickness in the left caudal middle frontal cortex on MRI. The increase was not linked to age and did not correlate directly with a corresponding change in any cognitive domain.

Aerobic capacity increased significantly ( $\beta$  2.718;  $P=0.003$ ) and body mass index (BMI) decreased significantly ( $\beta$  –0.596;  $P=0.013$ ) in the aerobic exercise group, but not in controls.

Interestingly, older adults in this study appeared to benefit more from aerobic exercise than their younger counterparts, observed James Blumenthal, PhD, of Duke University Medical Center in Durham, North Carolina, who was not involved with the research.

“The mechanisms responsible for the improvement in executive function are unclear, although improved

– Continued on page 3

**WNA 2019 ANNUAL CONFERENCE**  
**Friday, May 10, 2019**

**Trinity United Presbyterian Church, 1600 Carver Road, Modesto, CA**  
**Information and Registration form on page 7**

# Roster of Our WNA Information and Support Groups

## 2019 WNA Board of Directors

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**Please contact  
your group leader  
or check your  
local paper to  
find out about  
the topic/speaker  
for the upcoming  
meeting.**

**Bev Anderson**  
Editor

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## CALIFORNIA

### Auburn

1st Monday, 11 AM  
Woodside Village MH Park  
12155 Luther Road  
Sharlene McCord (530) 878-8392

### Castro Valley

2nd Wednesday, 1:30 PM  
First Presbyterian Church  
2490 Grove Way (next to Trader Joe)  
Joy Rotz (510) 842-8440

### Concord

3rd Thursday, 1:30 PM  
First Christian Church  
3039 Willow Pass Road  
Wayne Korsinen (925) 685-0953

### Davis

2nd Tuesday, 3:30-5:00 PM  
Davis Senior Center, 646 A Street  
Mary Sprifke (530) 756-5102

### Elk Grove

2nd Tuesday, 1 PM  
Elk Grove Senior Center  
8830 Sharkey Avenue  
Roger White (916) 686-4719

### Folsom

3rd Wednesday, 12:30 PM  
Association Resource Center  
950 Glenn Dr., Suite 150  
Bev Anderson (877) 622-6298

### Fresno

3rd Tuesday, 11:00 AM  
Community United Church of Christ  
5550 N. Fresno Street  
Bonnie Zimmerman (559) 313-6140

### Grass Valley

2nd Monday, 1:30 PM  
GV United Methodist Church  
236 S. Church Street  
Bev Anderson 877-622-6298

### Livermore

4th Tuesday, 10 AM  
Heritage Estates  
900 E. Stanley Blvd.  
Lee Parlett (925) 292-9280

### Merced

2nd Thursday, 1 PM  
Central Presbyterian Church  
1920 Canal Street  
(Hoffmeiser Center across from the church)  
Larry Frice (209) 358-2045

## Modesto

3rd Monday, 10:30 AM  
Trinity United Presbyterian Church  
1600 Carver Rd., Rm. 503  
Ray (209) 634-4373

## Monterey

3rd Wed., 10:30 AM (odd numbered months)  
First Presbyterian Church  
501 El Dorado Street  
Dr. William Donovan (831) 625-3407

## Napa

1st Thursday, 2 PM  
Napa Senior Center, 1500 Jefferson St.  
Ron Patrick (707) 257-2343  
bonjournapa@hotmail.com

## Placerville

2nd Wednesday, 1 PM  
El Dorado Senior Center  
937 Spring Street  
Bev Anderson (877) 622-6298

## Redwood City

4th Tuesday, 1 PM  
Sequoia Hospital Health and Wellness Center  
749 Brewster Avenue  
Danielle LaFlash (415) 297-1815

## Roseville

2nd Wednesday, 1PM (odd numbered months)  
Sierra Point Sr. Res.  
5161 Foothills Blvd.  
Stan Pashote (916) 409-5747

## Sacramento

3rd Tuesday, 1:30 PM  
Northminster Presby. Church  
3235 Pope Street  
Charles Moore (916) 485-7723

## San Francisco

2nd Monday, 11 AM – 12:30 PM  
Kaiser French Campus  
4141 Geary Blvd. between 6th & 7th Ave.  
Rm. 411A - Watch for signs.  
Merle (415) 346-9781

## San Jose

3rd Saturday, 10:30 AM  
O'Conner Hospital, 2105 Forest Avenue  
SJ DePaul Conf. Rm.  
Danielle LaFlash (415) 297-1815

## Santa Barbara

4th Saturday, 10AM (Sept., Oct., Jan., March, May)  
St. Raphael Catholic Church  
5444 Hollister Ave., Conference Room  
Shirley Hopper (805) 689-5939

## Santa Cruz

3rd Wednesday, 12:30 PM (odd numbered months)  
Trinity Presbyterian Church  
420 Melrose Avenue  
Mary Ann Leer (831) 477-1239

## Santa Rosa

1st Wednesday, 10:30 AM  
Steele Lane Community Center  
415 Steele Lane  
Judy Leandro (707) 480-3740

## Thousand Oaks – Westlake Village

2nd Monday, 2:30 – 4 PM  
United Methodist Church of Westlake Village  
1049 S. Westlake Blvd.  
Angie Becerra (805) 390-2999

## Walnut Creek

4th Friday, 10 AM  
Rossmoor, Hillside Clubhouse  
Vista Room  
Karen Hewitt (925) 932-2248

## NEVADA

### Las Vegas

3rd Thursday, 1 PM  
Mountain View Presbyterian Church  
8601 Del Webb Blvd.  
Barbara Montgomery (818) 400-0296

## OREGON

### Grants Pass

3rd Wednesday 2:00 PM  
Club Northwest  
2160 N.W. Vine St.  
Carol Smith 541-955-4995  
David Tally 541-218-4418

**Start a support group  
in your area:  
Contact Bev Anderson at  
(877) 622-6298 or  
info@pnhelp.org**

For information on groups in the following areas or any other place you are interested in finding out about a support group, call Bev Anderson at (877) 622-6298. She is actively trying to open new groups and re-open closed groups. Check with her about a group in your area especially if you would volunteer to be the leader. New Leadership needed. No meetings for now. Contact for information: Bev Anderson 877-622-6298. **California:** Alturas, Antioch-Brentwood, Bakersfield, Berkeley - Oakland, Carmichael, Clearlake, Costa Mesa, Crescent City, Eureka, Fort Bragg, Garberville, Jackson, Lakeport, Lincoln, Lodi, Madera, Mt. Shasta, Oxnard, Quincy, Redding, Salinas, Santa Maria, San Rafael, Sonoma, Sonora, Stockton, Susanville, Truckee, Tulare-Visalia, Turlock, West Sacramento, Weed, Ukiah, Woodland, Yreka, Yuba City-Marysville. **Nevada:** Reno-Sparks. **Oregon:** Brookings, Medford, Portland, Salem.



We are having winter where I live with a sizable amount of rain and snow. Some winters, I rarely see snow. This year, I keep getting snowed in as the snow has come down to low altitudes somewhat regularly. My yard and roof just about get cleared off and another storm comes along. Of course, some of you live in snow for weeks or even months at a time. Brrr, it is cold.

We received some disappointing news. The medication going to clinical trials that we have been tracking at University of California-Davis that was to start Clinical Trials in April has been pushed back to June due to the government shut down. It is being set up to be monitored by the National Institutes of Health that were shut down during that time. If there is another shut down, it will be put off further. Let's hope we don't have it happen again.

If it is possible for you to be at this year's conference, I urge you to attend. We have more space than we have had in recent years. For most, it is not really that far to Modesto and for many it is closer than it has been recently. We now have a special rate at Holiday Inn and Suites Express. It is \$139 plus tax for a king or two queen bedroom. If you choose to stay there, call (209) 543-9009 and tell them you are attending the Western Neuropathy Association Conference. The rate is good for the night before and the night after the event. There are a number of other motels in the area at a variety of rates. So, if you want to come early and or stay late, you have options. I think if you come, you will be glad you did.

I've had several researchers contact me to ask if they could be in contact with neuropathy patients to ask questions about pain levels or a variety of other aspects of experiencing neuropathy. One is listed in this newsletter with questions asking people to respond. If you possibly can, please take time to answer as many as you are able. We are asking that you send them to our office so we can have a copy to send to the other group that is asking. Your name or other identifying information will remain confidential to us. So, you don't have to put in any personal identity information except your name for my reference. I'll remove that before copying it.

Happy March,

*Bev*

### **Aerobic Exercise Boosts Cognition in Younger Adults** – *Continued from page 1*

aerobic fitness apparently mediated the improvements among those who completed the aerobic exercise intervention," Blumenthal told MedPage Today. "However, because participants in the aerobic exercise condition also lost more weight, it is unclear whether improved aerobic capacity or weight loss may have contributed to the observed improvements in executive function."

Studies of older adults, including the ENLIGHTEN trial which Blumenthal led, also showed that aerobic exercise had a beneficial effect on executive function<sup>2</sup>, but not language or memory.

"Executive function usually peaks around age 30," Stern said. "I think that aerobic exercise is good at rescuing lost function, as opposed to increasing performance in those without a decline."

The researchers noted several limitations to the study, including the small sample size. Future studies should assess whether the effects of exercise can be sustained over longer periods of time, the team added.

The study was supported by the National Institutes of Health.

The researchers reported relationships with Eli Lilly, Axovant, Takeda, AbbVie, Apos-Therapy, Inc., LIH Medical, Everest Foundation, and the California Walnut Commission.

• Primary Source: Neurology

Source Reference: Stern Y, et al "Effect Of Aerobic Exercise On Cognition In Younger Adults" Neurology 2019; DOI: 10.1212/WNL.0000000000007003. <http://n.neurology.org/content/early/2019/01/30/WNL.0000000000007003>

1 <https://clinicaltrials.gov/ct2/show/NCT01179958>

2 <https://www.medpagetoday.com/neurology/dementia/77030>

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### **Help With Health Care Challenges**

If the number is not in your area, call the one listed and ask for the right number.

#### **Medicare**

[www.Medicare.gov](http://www.Medicare.gov)

...

#### **The Affordable Health Care Act**

For current information go to [www.HealthCare.gov](http://www.HealthCare.gov)

...

#### **HICAP Health Insurance Counseling**

for seniors and people with disabilities. [www.cahealthadvocates.org/HICAP/](http://www.cahealthadvocates.org/HICAP/) Call (800) 434-0222 to ask a question or to make an appointment.

...

#### **Health Rights Hotline**

Serving Placer, El Dorado, Yolo, & Sacramento Counties, regardless where you receive your health coverage. Tollfree (888) 354-4474 or TDD (916) 551-2180. In Sacramento, (916) 551-2100. [www.hrh.org](http://www.hrh.org).

...

#### **HMO Help Center Assistance**

24 hours a day, seven days a week. (888) HMO-2219 or (877) 688-9891 TDD

...

**DRA's Health Access Project** Free publications about the health care, insurance rights and concerns of people with disabilities and serious health conditions. For more information, go to <http://dralegal.org/> and click on "Projects".

## DISCOUNTS FOR WNA MEMBERS

The following companies or individuals have agreed to give WNA a discount to WNA members. Give them a call or visit. If you choose to purchase the service or wares of any on this list, pull out your WNA Membership Card and claim the discount.

### Anodyne Therapy

Infrared Light Therapy equipment - **12% off all home units.**  
Contact: 800-521-6664 or [www.anodynetherapy.com](http://www.anodynetherapy.com)

**HealthLight** Infrared Light Therapy equipment - **5% off Single Boot System and Dual boot system.**

Contact: 888-395-3040 or [www.healthlight.us](http://www.healthlight.us)

### Auburn

#### The Footpath

825 Lincoln Way  
(530) 885-2091  
[www.footpathshoes.com](http://www.footpathshoes.com)  
**WNA Discount: 10% off the regular price shoes.**

### Elk Grove

#### Shoes That Fit

8649 Elk Grove Blvd.  
(916) 686-1050  
**WNA Discount: 20% off the regular price shoes.**

### Fortuna

#### Strehl's Family Shoes & Repair

Corner of 12th & Main  
1155 Main Street  
(707) 725-2610  
Marilyn Strehl, C.PED  
is a Certified Pedorthic  
**WNA Discount: 10% off the regular price shoes.**

### West Sacramento

#### Beverly's Never Just

#### Haircuts and Lilly's Nails

2007 W. Capitol Ave  
Hair - (916) 372-5606  
Nails - (916) 346-8342  
**WNA discount: 10% off the regular price.**

- Continued on page 5

## CAN THE SUN PROTECT AGAINST DIABETES?

### Brazilian Women With Lower Vitamin D Levels Were 30% More Likely To Have High Blood Glucose

By Kristen Monaco, Staff Writer, MedPage Today, January 31, 2019

Lower levels of vitamin D were tied to higher glucose levels in a study of Brazilian women.

In the cross-sectional analysis, more than 65% of women had hypovitaminosis D -- considered to be a serum 25(OH)D level under 30 ng/mL -- which was associated with higher odds of having a blood glucose level of 100 mg/dL or higher (OR 1.29, 95% CI 1.05-1.57, P=0.015).

This relationship was also seen among women with even lower serum levels of vitamin D, Tânia Valladares, MSc, of the University of Sao Paulo School of Public Health in Brazil, and colleagues wrote in *Menopause: The Journal of The North American Menopause Society*.

Among the quarter of women with a serum 25(OH)D level <20 ng/mL, they also had significantly higher odds of having a blood glucose level of 100 mg/dL or higher, although the magnitude was no greater (OR 1.25, 95% CI 1.04-1.50). Self-reported use of supplements was not associated with blood glucose levels.

"It has been postulated that vitamin D plays a role in pancreatic beta cell function, improving the insulin response to an increase in the blood glucose level," Valladares' group explained. "Those data underscore a potential benefit of a higher 25(OH)D level in individuals who still have a minimal beta cell population, improving the insulin response and perhaps preventing the progression of insulin dependence."

The findings were consistent with the literature, the researchers said, although intervention studies haven't shown any significant benefit to vitamin D supplements. Consequently, they recommended future studies should aim to differentiate whether or not serum vitamin D "can actually improve blood glucose levels or if its importance is restricted to its function as a marker of ill health."

In a statement, JoAnn Pinkerton, MD, executive director of the North American Menopause Society, who was not involved with the study, underscored the importance of the relationship between low vitamin D levels and type 2 diabetes. "Vitamin D supplementation may help improve blood sugar control, but intervention studies are still needed," she said. However, Pinkerton also stressed that no causal relationship between these two variables has been proven yet.

When determining vitamin D deficiency in patients, the American Association of Clinical

Endocrinologists (AACE) and the American College of Endocrinology (ACE) note that "defining 'vitamin D inadequacy' is extremely controversial."

"[Randomized controlled trials] evaluating nutrients are often confounded when 'low' nutrient status is not established, since nutrients reach a threshold effect in which greater amounts do not provide enhanced physiologic effects. As such, providing vitamin D to volunteers who are vitamin D replete should not be expected to demonstrate beneficial effects," they explain in their position statement on the use of vitamins and minerals in skeletal health.

The current study's cutoff of 30 ng/mL for vitamin D deficiency is the same as that recommended by AACE and ACE.

For the analysis, 680 women ages 35-74 completed interviews and physical exams and gave blood samples. Their mean blood glucose was 105 mg/dL, while the average 25(OH)D level was 26.4 ng/mL. Among the cohort, 3.5% reported taking vitamin D supplementation, which -- as expected -- was negatively associated with having low vitamin D (OR 0.44, 95% CI 0.19-0.99, P=0.049) levels. Women who reported having habitual sun exposure also saw lower odds of having a serum vitamin D level under 30 ng/mL (OR 0.68, 95% CI 0.48-0.96, P=0.028), but no significant risk of excessive blood glucose (OR 1.03, 95% CI 0.85-1.25).

A glucose level of 100 mg/dL or higher wasn't only associated with low vitamin D levels, but was also significantly tied to obesity, hypertension, and older age among women:

- BMI  $\geq$ 30: OR 1.42 (95% CI 1.19-1.69, P<0.001)
- SBP  $\geq$ 130 or DBP  $\geq$ 85 mmHg: OR 1.27 (95% CI 1.03-1.56, P=0.025)
- Age 60+: OR 1.33 (95% CI 1.11-1.61, P=0.003)

Among the study's limitations were that data on sun exposure, vitamin D supplementation, medication use, and other potential confounders were self-reported. Also, the cohort was exclusive to women living in a tropical region of Brazil where sunlight is relatively strong and plentiful.

The study was supported by the Fundação de Amparo à Pesquisa do Estado de São Paulo.

- Continued on page 5

## YOUR OPPORTUNITY TO HELP WITH RESEARCH IS HERE

*"My name is Anne-Claire den Hartog and I am a graduate student at North Carolina State University in Raleigh, NC. I am currently working on a final project that is being run alongside a professor here at State who has discovered, and is seeking to develop, a natural compound that shows promising signs of inhibiting neuropathic pain symptoms. My team and I are trying to better understand the different kinds of neuropathic pain, the effects it has on daily life, the available treatments, the issues with current treatments, the need for new ones, what patients are struggling with, what they are looking for in managing their PN, etc. Any and all of this information would be helpful to us as we seek to better understand neuropathic pain, and whether or not this compound could be beneficial in relieving it."*

*"I am very glad to be working on this project, and hope that it will be fruitful and ultimately provide people with a reliable and safe product to help relieve their pain and provide a better overall quality of life. This is the main reason I decided to pursue a degree in biotechnology; I would like a career in medical biotechnology where I can be a part of a team/company looking to discover and develop solutions to serious medical problems."*

Here are the questions that Anne-Claire gave us. I plan to give my answers. I hope you do too. Send your response to [info@pnhelp.org](mailto:info@pnhelp.org). That is my e-mail address from our office. It comes into my e-mail at home. I'll make copies to send to Anne-Claire but also to a young man who is an intern in a research program at San Diego State University in California. He is formulating his

questions, which may be somewhat different. He will be especially interested in men who fill this out so the only identifying information I will likely put on any of the reports is if it is from a woman or a man as sometimes there is an important difference in a person's response and description of their experience. So, men, please know this is a project that especially needs you. I will send the questions I get from San Diego to men who send a report on these questions.

On a page you will send as an attachment or directly on the e-mail, list your name, leave four lines so I can remove your name before it is copied. Then number your answers so they can be seen to coincide with the question. You don't have to repeat the question.

1. What type of neuropathy do you have?
2. How long have you had it?
3. How often do you experience pain?
4. Where is your pain located?
5. How much does your pain interfere with your daily activities and with your sleep?
6. How do you currently manage your pain?
7. When thinking about current/previous pain treatments, what did you like? Dislike?
8. How do you prefer to take treatment? Oral, topical, injectable, etc.
9. Are there side effects to current treatment?
10. Would you consider switching treatments?
11. Would you consider a topical treatment?
12. What are your biggest concerns with current treatment?
13. What is your age?

Send your response to [info@pnhelp.org](mailto:info@pnhelp.org).

## DISCOUNTS FOR WNA MEMBERS

*Continued from page 4*

### Neuropathy Support Formula

(1-888-840-7142) is a supplement that a sizable number of people are taking and reporting it has helped them. The company gives members of WNA a discount and free shipping. The 30-day supply is \$40 (normally \$49.97). It can be auto-shipped monthly for the same. A 3-month supply via auto-ship is \$95.00. They also have a Nerve Repair Optimizer that is available for \$20 with free shipping. Marsha, the manager, said that if anyone wants more information about the product, they can call and ask for her. If she is not readily available, leave your number and she will call you back.

### Additional Discounts

Do you know a business that might offer our members a discount? Tell them that they will be listed each month in our newsletter and on our website so our members will know of their generosity and patronize their business. Call (877) 622-6298 or e-mail [info@pnhelp.org](mailto:info@pnhelp.org).

We'll mail an agreement form to the business, and once we have it, we'll add them to this list.

## Can the Sun Protect Against Diabetes? – Continued from page 4

Valladares and co-authors reported no disclosures.

Primary Source: Menopause

Source Reference: Valladares T, et al "Higher serum levels of vitamin D are associated with lower blood glucose levels" Menopause 2019; DOI: 10.1097/

GME.0000000000001308.

[https://journals.lww.com/menopausejournal/Abstract/publishahead/Higher\\_serum\\_levels\\_of\\_vitamin\\_D\\_are\\_associated.97422.aspx](https://journals.lww.com/menopausejournal/Abstract/publishahead/Higher_serum_levels_of_vitamin_D_are_associated.97422.aspx)

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## UNDERSTANDING NEUROMODULATION

**New gift will help researchers study basic and applied science behind this pain-relieving approach.**

01/08/2019 Published In NEUROLOGIC WINTER 2019

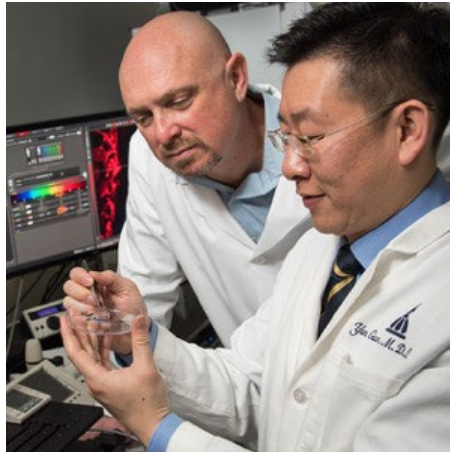
For centuries, people have been applying stimuli aimed at nerves that don't ferry pain signals to affect the function of those that do, an effect known as neuromodulation. It's the concept behind transcutaneous electrical nerve stimulation (TENS) units or implanted spinal cord stimulators. And while many patients report that these interventions provide substantial relief, exactly how they work has been a mystery.

"Although there are a lot of educated guesses about how these devices work, the truth is that no one really knows," says Michael Caterina, director of the Neurosurgery Pain Research Institute at Johns Hopkins. "The science behind neuromodulation is limited."

A recent \$3.5 million gift from the Theodore N. Lerner Family Foundation, establishing the Lerner Family Fund for Pain Research, will help researchers delve into the mechanisms behind this phenomenon—potentially leading to new ways to effectively apply this strategy to more patients. This endowed fund will be split between the Neurosurgery Pain Research Institute at Johns Hopkins and the laboratory of Thomas Smith, a specialist in palliative care at the Johns Hopkins Sidney Kimmel Comprehensive Cancer Center.

The institute is using much of its part of the gift to fund basic research in the lab of Yun Guan, a researcher in Johns Hopkins' Departments of Anesthesiology and Critical Care Medicine and Neurosurgery and the institute's Director of Pain Neuromodulation Research. Guan's is working on developing animal models to study the fundamental mechanisms of neuromodulation at the cellular and molecular level. Developing an essential understanding of neuromodulation at the most basic level, explains Caterina, can help researchers make these pain-fighting modalities work better and longer for a broader swath of patients.

This work is already paying dividends, he adds. In a recently published study, Guan, along with Gene Fridman in Johns Hopkins' Departments of Biomedical Engineering and



Gene Fridman and Yun Guan recently showed that application of direct electrical current can block the activity of pain-promoting neurons.

Electrical and Computer Engineering and their colleagues, showed that using direct current—rather than the alternating current of most neuromodulatory devices—disproportionately blocks the activity of neurons that promote pain, compared to those that quiet pain transmission. These findings could help researchers develop devices that target a range of different types of neurons or are tailored to specific types of pain.

Guan and his colleagues are also using this gift to collaborate with Smith, much of whose work focuses on a patented approach called Scrambler or Calmare Therapy. This form of neuromodulation involves several electrodes being placed on different areas of the body with electrical signals running concurrently between them for a set time period—for example, 30-45 minutes a day for two weeks. The two labs are working together to better understand the basic mechanisms behind why this therapy is so successful for some patients when other interventions have failed.

A subset of the gift will fund a fellow who will not only make contributions toward fundamental neuromodulation work in Guan's lab, but also use this research to launch her or his own scientific career—an expansive use of these funds that will continue this important work in future generations of scientists, Caterina says.

"Traditional funding sources tend to focus on additive research based on previously established research concepts. But truly novel exploratory ideas, like understanding neuromodulation for cancer-related pain, are less likely to receive funding," says Henry Brem, director of Johns Hopkins' Department of Neurosurgery.

"These types of high-risk, high-yield programs benefit enormously from philanthropy. It's our hope that with these nontraditional funding methods, we will make discoveries that are not just evolutionary, but revolutionary."

Used by permission of Johns Hopkins University Medical Center.

## GOOD NEWS FOR OLDER BRAINS

Healthy older adults appear to produce as many new brain cells as younger adults do, according to a Columbia University study. When researchers examined 28 people 14 to 79 years of age, they found that the production of new brain cells was steady across the ages. (Science Cell Stem Cell, April 5, 2018. Reported in CR Consumer Reports On Health, July 2018).



# WESTERN NEUROPATHY ASSOCIATION

Hope through caring, support, research, education, and empowerment

Our mission is to provide support, information and referral to people with neuropathy and to those who care about them, to inform and connect with the health care community, and to support research.

## Western Neuropathy Association 2019 Annual Conference

**Date: Friday, May 10, 2019**

**Time: 9:30 AM to 3:30 PM**

**Pre-register By:  
Tuesday, April 20, 2018**  
Seating is limited. Must register in advance.

**Registration Fee: \$25.00**

**Location:  
Trinity United Presbyterian Church  
1600 Carver Road, Modesto, CA**

**Questions?  
Toll-free: (888) 556-3356  
E-mail: [lindsayc@pnhelp.org](mailto:lindsayc@pnhelp.org)**

- 9:30am **Registration check-in** (must register in advance; limited seating)  
Morning snacks and coffee included
- 10:00am **Announcements and Introductions**
- 10:30am **Jeffrey Ralph, M.D.** – Highly Rated Neurologist, University of California – San Francisco  
He plans to bring an associate with him.  
**“What a Neuropathy Patient Needs to Know”**
- Noon **Catered Lunch** (included with registration)  
Check out raffle prizes and silent auction opportunities  
Awards
- 1:00pm **Bryn E. Miller, Registered Dietitian** – Kaiser Permanente – Modesto  
**“A Guide to Healthy Eating”**
- 2:00pm **Alan Eighmey** – Elder Law Attorney, Turlock, CA  
**“Being Sure All Is in Order”**
- 3:00pm **Raffle Prizes, Silent Auction, Evaluation, Closing Announcements**
- 3:30pm **Close of Conference**

We are hopeful that a surprise special guest will be with us at least part of the day. Some schedule changes may be needed if this occurs.

WNA has a special rate for stay at the Holliday Inn and Suites Express for king bed or 2 bed rooms. It is \$139.00 plus tax. To make a reservation call the hotel directly at 209-543-9009 and ask for the Western Neuropathy Association room block. Reservations must be received by Friday, April 19, 2019, to qualify for this rate. Otherwise, it will be the regular rate for the room. Every attempt will be made to accommodate special requests for room types, including however due to the arrival and departure patterns, not all requests may be able to be fulfilled.

Sponsor



Register online at  
[www.WNAinfo.org](http://www.WNAinfo.org)



Mail registration fee and form to:

WNA  
PO Box 276567  
Sacramento, CA 95827

Name \_\_\_\_\_

Address \_\_\_\_\_

City / State / Zip \_\_\_\_\_

E-mail \_\_\_\_\_

Support Group \_\_\_\_\_  At Large Member

If you need a special diet, please indicate:  Vegetarian  Gluten Free  Other

I am enclosing my check for the \$25 registration fee (includes lunch and morning snacks).



# WESTERN NEUROPATHY ASSOCIATION

A California public benefit, nonprofit, tax exempt corporation

P.O. Box 276567, Sacramento, CA 95827-6567

Call WNA using our toll free phone numbers:

**(877) 622-6298** ■ Email: [info@WNAinfo.org](mailto:info@WNAinfo.org)

■ PN Information/Advice ■ Support Group Inquiries

**(888) 556-3356** ■ Email: [admin@WNAinfo.org](mailto:admin@WNAinfo.org)

■ Membership Information/Inquiries ■ Sponsorships

■ General Organizational Inquiries ■ [www.WNAinfo.org](http://www.WNAinfo.org)



## DIABETES INFORMATION

For a good overview of diabetes, preventative measures, and treatment, this is a great article for both those that are dealing with it personally and those that are not. It is done by WebMD.

[https://www.webmd.com/diabetes/ss/slideshow-diabetic-peripheral-neuropathy-prevent-treat?ecd=wnl\\_spr\\_020919&ctr=wnl-spr-020919\\_nsl-Bodymodule\\_Position3&mb=KAsUEq6amiQgN8xcYBko0Hg0WleHxvlqg5v7dj1NFTE%3d](https://www.webmd.com/diabetes/ss/slideshow-diabetic-peripheral-neuropathy-prevent-treat?ecd=wnl_spr_020919&ctr=wnl-spr-020919_nsl-Bodymodule_Position3&mb=KAsUEq6amiQgN8xcYBko0Hg0WleHxvlqg5v7dj1NFTE%3d)

## DIABETES; THE RIGHT STEPS FOR A HEALTHY LIFE

DIABETES; THE RIGHT STEPS FOR A HEALTHY LIFE is another excellent article written for people at risk for or have diabetes. It is in the July 2018 issue of ON HEALTH from Consumer Reports.

One thing this article mentions is getting enough sleep. *“When you’re stressed, your body ramps up production of the hormone cortisol, which increases your body’s blood glucose levels,”* says Betul Hatlpoglu, M.D. *“The same thing happens when you get too little sleep.”* A study found that 6 ½ to 7 ½ hours of sleep did well up to eight hours. Less than five or more than eight was not recommended. The best is seven to eight hours of sleep a night. These people have a lower risk of developing type 2 diabetes.



### Western Neuropathy Association (WNA)

A California public benefit, nonprofit, tax-exempt corporation.

Bev Anderson, Editor

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WNA Headquarters: [admin@WNAinfo.org](mailto:admin@WNAinfo.org)

Our mission is to provide support, information and referral to people with neuropathy and to those who care about them, to inform and connect with the health care community, and to support research.

Dues - \$30 a year

All contributions and dues are tax-deductible.

We are supported by dues-paying members, contributions by members and friends, and occasionally, small grants and fundraisers.

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