Essential Tremor • Meet our physicians • PD Self Seminar

A publication of Aurora Health Care

Edition 5 • November 2018



ADVANCEMENTS IN **NEUROSCIENCE**



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Meet our providers



Taylor Finseth, MD, believes in the role of the physician as educator to empower patients and their caregivers to lead the best life possible. Dr. Finseth provides management of movement disorders including Parkinson's Disease, tremor, dystonia, restless legs and deep brain stimulation programming and

performs botulinum toxin (botox) injections for dystonia, chronic migraine and other conditions.

Dr. Finseth earned his medical degree at The Ohio State University College of Medicine, Columbus, OH, and completed both his residency in Neurology and fellowship in Movement Disorders at the University of Colorado, Aurora CO. He is board certified by the American Board of Psychiatry and Neurology.

Aurora Health Care Surgical Specialists 2801 W. Kinnickinnic River Parkway Suite 550 Milwaukee, WI 53215 • 414-649-3240



Kyle Swanson, MD, provides surgical treatment for patients experiencing epilepsy, movement disorders, pain disorders such as trigeminal neuralgia, brain tumors, brain and spine trauma, degenerative spine disorders, hydrocephalus, intracranial hemorrhage and peripheral nerve disorders.

His particular focus is on functional neurosurgery including the surgical treatment of movement disorders such as Parkinson's disease, essential tremor and dystonia, with a special emphasis on asleep image-guided deep brain stimulation. Additionally he has training in epilepsy surgery, including open resection, minimally invasive laser ablation and neurostimulation. Finally, he is interested in the surgical treatment of pain disorders including spinal cord stimulation and microvascular decompression for trigeminal neuralgia.

Dr. Swanson earned his medical degree at the University of Wisconsin School of Medicine and Public Health and completed his residency in Neurological Surgery at the University of Wisconsin Hospital and Clinics both in Madison, Wisconsin. He completed his fellowship in Stereotactic and Functional Neurosurgery at Barrow Neurological Institute in Phoenix, Arizona..

Aurora Neuroscience Innovation Institute 2801 W. Kinnickinnic River Pkwy Suite 680 Milwaukee, WI 53215 • 414-385-1922



Shawn Witton, MD, is skilled in providing video EEG, ambulatory EEG, evoked potentials, WADA testing, lumbar punctures, intraoperative/extraoperative mapping and vagus nerve stimulation. His areas of interest include epilepsy/seizures and neurology.

Dr. Whitton received his medical degree from Ross University School of Medicine, Portsmouth Dominica, West Indies. He completed his residency in neurology at the University of Missouri. Dr. Whitton also completed an epilepsy fellowship at the University of Michigan.

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Umang Shah, MD, is a board-certified physician specializing in neurological disorders and clinical neurophysiology. He has advanced training in procedures such as electromyogram/nerve conduction study (EMG/NCS), electroencephalogram (EEG), evoked potentials and intraoperative monitoring. In addition, Dr. Shah

has special interest in seizure/epilepsy, neuromuscular disorders, stroke and headache medicine.

In the last year of his neurology residency, Dr. Shah was appointed Chief Resident. He is certified by the American Board of Psychiatry and Neurology.

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Kathryn Gaines, MD, is a neurologist with special interest in neurologic movement disorders.

Medical Education: Philadelphia College of Osteopathic Medicine

Residency: Medical University of South Carolina - Neurology

Board Certifications: Neurology - American Board of

Psychiatry and Neurology

Fellowships: Movement Disorders - Medical University of South Carolina

Aurora Health Center

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Ali Hussein Alrefai, MD, is a neurologist with special interest in neurologic movement disorders and demyelinating diseases..

Medical Education: Jordan University of Science & Technology

Residency: University of Arkansas-Medical Sciences - Neurology

Board Certifications: Clinical Neurophysiology - American Board of Psychiatry and Neurology

Neurology - American Board of Psychiatry and Neurology

Fellowships: Clinical Neurophysiology - University of Texas - Houston, Memorial Hermann (ACGME accredited)

Movement Disorders - University of Texas - Houston, Memorial Hermann

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Amit Ray, MD, a board-certified neurologist, Amit Ray, MD, treats illness and injuries involving the brain and nervous system. A highly-trained specialist with interests in epilepsy, stroke prevention and treatment, headaches and memory disorders, Dr. Ray works closely with patients and their primary care physicians to provide optimal care.

Medical Education: Maulana Azad Medical School

Residency: University of Chicago - Neurology

Board Certifications: Clinical Neurophysiology - American Board of Psychiatry and Neurology Epilepsy - American Board of Psychiatry and Neurology Neurology - American Board of Psychiatry and Neurology

Fellowships: Clinical Neurophysiology - Cleveland Clinic Foundation (ACGME accredited)

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Veronica Sosa, MD, is a board-certified neurologist who specializes in addressing the concerns of patients with epilepsy through comprehensive care, including the surgical management of epilepsy. Dr. Sosa knows that epilepsy can be complicated. She enjoys working with patients to help them understand their

options and develop a care plan that is both safe and practical for their unique situations.

After earning her medical degree and completing her residency, Dr. Sosa completed an epilepsy and clinical neurophysiology fellowship at the Cleveland Clinic in Ohio,

which focused on the treatment of both adult and pediatric patients.

Prior to joining the Epilepsy and Seizure Care Specialists in Milwaukee, Dr. Sosa was a senior staff neurologist, as well as director of clinical neurophysiology residency and coordinator of the EEG/epilepsy fellowship program, all at Henry Ford Hospital in Detroit, Mich. Dr. Sosa has been actively involved in numerous research projects and has frequently made professional presentations on a variety of topics related to both neurology and sleep disorders.

Aurora Neuroscience Innovation Institute

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Six Proven Ways to Treat Essential Tremor

By: Taylor Finseth, MD

Are you among the 7 million Americans who have essential tremor? If your hand shakes involuntarily or another part of your body trembles, you may have essential tremor. Essential tremor (ET) can be confused with Parkinson's disease, but ET is different and much more common. A health care clinician can tell the difference between the two conditions. Both women and men of any age can be affected by ET, but it's more common in middle age and later in life. The tremors can affect your arms, legs, trunk, head and even your voice.

We don't have a definitive cure for essential tremor. If the symptoms are mild, you may not even need treatment. If the symptoms affect your daily activities, work or your quality of life, discuss your concerns with your health care clinician.

How Is Essential Tremor Treated?

If the tremors are mild, some simple lifestyle changes may help:

- 1. Follow an appropriate sleep schedule. For some people, physical exhaustion can cause tremors.
- Try relaxation techniques. This can work well for tremors brought on by stress or heightened emotions.
 - a. If the condition is more problematic, your clinician may do some tests to find the underlying cause.
 Depending on the cause, additional treatment options may be available.
- 3. Employ occupational therapy. An occupational therapist can help you adjust to living with the tremors. Some simple changes can make life easier, like using eating utensils with larger handles, wearing wrist weights to stabilize the hands, or selecting clothes with no buttons so they're easier to get on and off.
- 4. Avoid aggravating substances. Medications (like certain antidepressants, antiepileptics or inhalers) or foods (caffeine, energy drinks) can worsen tremor. Ask your doctor if any of your medications could be the source of your problems.
- 5. Take prescribed medications. Based on the underlying cause, we'll recommend a good option. A good result with medication would be reduction in tremor by about 50 percent.
 - a. Propranolol. This is a beta blocker. These meds are commonly used to treat high blood pressure.
 Don't use beta blockers if you have asthma or

heart problems. Side effects can include fatigue and lightheadedness.

- b. Primidone. This antiseizure drug is typically used to treat epileptic seizures. Side effects can include short-term drowsiness, concentration problems or nausea.
- c. Botox. This injectable drug is an accepted treatment for conditions such as migraine, bladder dysfunction and excessive sweating. It can also be used to treat hand, head or voice tremors. When used for hand tremors, you may notice finger or wrist weakness. When used for voice tremors, Botox can cause a raspy voice or swallowing difficulties.
- d. Various other medications can also be tried, including clonazepam, gabapentin, topiramate and zonisamide, although these are generally less effective.
- 6. Utilize surgical treatments. These methods are used for bothersome or disabling tremor that is not adequately managed on medication. A good result with surgery would be elimination or near elimination of tremor.
 - a. Deep Brain Stimulation. This is the most effective and most proven tremor therapy and frequently can result in tremor freedom. A thin wire is surgically implanted into a deep region of the brain that is involved in generating tremor. Electrical stimulation delivered at the tip of the wire is adjusted by your doctor and powered by a battery pack placed in the chest. Deep Brain Stimulation offers the ability to treat tremor on both sides and can be adjusted over time. There are risks of bleeding, infection, speech or balance issues with the surgery.
 - b. Focused X-rays or Ultrasound. During stereotactic radiosurgery, the surgeon directs X-rays or Ultrasound at the specific part of the brain that's the source of the tremors. Special imaging technology helps direct the X-rays to the precise target. These techniques are limited to only treating one arm rather than both arms and cannot be adjusted after they are done.

Deep Brain Stimulation



On a warm summer day, Sandy Ploor of West Bend is steady on a walk through her neighborhood. There are no signs of the 74-year-old slowing

In fact, she's just getting started. "You have to learn to laugh at yourself. That's how it got me through a lot of that." Ploor said. Just

a few months ago, Ploor says holding a glass of water was nearly impossible.

About 20 years ago, Ploor started getting the shakes. At first, it was only slight and in her right hand.

"I used to be right-handed and I trained myself to write with my left hand," Ploor recalled. But even that didn't work for long. "I could never read what I wrote and that was so frustrating," Ploor said.

Ploor was diagnosed with essential tremor. The symptoms are often mistaken for Parkinson's disease and are quite similar. Essential tremor is commonly associated with shaking and trembling. Ploor was on medication, but it wasn't helping.



"I was carrying some cookies, Christmas

cookies, and it was on a tray and all of a sudden I'm walking along and the cookies are bouncing along, really up high in the air," Ploor remembered. Ploor's condition was getting worse and worse. "Getting the food into your mouth. You couldn't. It's almost like I had to stick my tongue out to steady the utensil," Ploor said.

She knew she needed someone to turn the page. So, she headed to Aurora St. Luke's. After several tests and consultations, Ploor met Dr. Kyle Swanson. Dr. Swanson is a neurosurgeon who introduced Ploor to a different option to help her tremors—Deep Brain Stimulation (DBS).

"Sometimes people describe it sort of as a pacemaker for the brain. It's changing the firing of the brain in order to make it work more the way that it should and get rid of the things that are abnormal," Dr. Swanson explained. DBS requires doctors to implant small electrodes onto the brain to help control irregular impulses—like shaking.

"We're trying to get within 2 millimeters of our target. We use that CT scan to verify that we've hit the target immediately after we place the electrodes," Dr. Swanson said about the DBS surgery.



Patients, like Ploor, are then connected to a device in their chest. "We connect the electrodes, which go in the front of the head here down underneath the skin, to a battery similar to a pacemaker that's implanted just below the collarbone," said Dr. Swanson. After her surgery, Ploor says she saw a difference right away.

"I came out of there and I was steady as a rock. And I was not even hooked up to my stimulator," Ploor said. The stimulators can't be turned on for about two weeks after surgery so the brain has time to heal. After that, patients can leave it on all the time or turn it off to preserve the battery. They also are monitored by their doctors to ensure the device is working properly. "The quality of life is just awesome," Ploor said.

After nearly two decades of living with shakes and trembles, Ploor is almost back to normal after only three months. She even enjoys eating out again. "And I didn't have to stick my tongue out to hold my food on a fork. And I'm like, 'Wow,' "Ploor said. It's given her everything she had hoped. Well, except for one thing she asked from her doctor. "When I went for a checkup I looked at him and I said, 'So, where's my blonde curly hair?' and he said, 'You're not getting it," Ploor joked.

There's no cure for essential tremor.

The DBS just eases the symptoms. Ploor is gaining strength every day. Her number one goal is to get her handwriting back to where it used to be. ■

Neurodiagnostics

EPILEPSY MONITORING UNIT

Patients whose seizures can't be controlled with medications and those who may be candidates for epilepsy surgery are often scheduled for long-term epilepsy monitoring in one of our Epilepsy Monitoring Units. Information from the study is used to determine if surgery is a viable treatment or if other options should be considered. This information helps to do the following:

- Establish an epilepsy diagnosis. In most epilepsy centers, about 1 in 4 patients who have seizure-like events do not have epilepsy
- Identify the seizure type. Some seizure medications are designed to treat certain types of seizures
- Locate the source. Monitoring can help identify the brain area where your seizures begin. Lateralization and localization (finding the side and area) of your seizures is a critical first step in planning any epilepsy surgery. Seizures are videotaped because your behavior during seizures can also help to locate the source
- Determine seizure frequency. Video EEG monitoring can identify how often you are having seizures.
 Frequently patients have seizures and don't know unless someone tells them

599 EMU admissions in 2017

ABRET LAB ACCREDITATION

The Laboratory Accreditation Board of ABRET has granted the EEG Laboratory at Aurora St. Luke's Medical Center a five-year accreditation. This award is based on an evaluation of the technical quality of the EEGs performed in this lab and on a review of specific policies from the Policy and Procedure Manual. The lab has been commended on their desire to promote excellence and competency in the department which has had a positive influence. There are only 156 accredited labs in the country.

EEG

Asleep

Ambulatory

• Ictal/PET Spec EEG

Pediatric

Long Term Monitoring

Epilepsy Monitoring Unit

EMG

Transcranial Doppler

SSEP

VEP

ERG

BAER

IONM

Moving Day Walk

This year's Moving Day Walk took place June 9, 2018 at Hart Park in Wauwatosa. It is put on every year, across the country, by the Parkinson's Foundation and just under \$72k was raised. Funds raised through Moving Day support the Parkinson's Foundation mission by delivering care to more than 127,000 people living with Parkinson's. funding cutting-edge research to improve treatments and providing free resources to people living with PD.











Man with life-threatening disease enters Terrain Race

By: Joe VanDeLaarschot

If you attended the Terrain Race in July at Little Switzerland in Slinger, you might've seen one particular participant and his entourage. Santino Morgese is an active 42-year-old, so it was a shock when he began experiencing tremors, slow movement and weakness that didn't make any sense. Originally diagnosed with Lyme disease, Morgese could tell something was still wrong.

In May 2017, Morgese, of Franklin, got his answer from Dr. Taylor Finseth at the Aurora Neuroscience Innovation Institute at Aurora Health Care. Morgese was diagnosed with multiple systems atrophy, a form of Parkinson's disease. Morgese began treatment and therapy immediately. In the back of his mind, Morgese knew he wanted to do an obstacle course-style race soon. Little did he know many of his medical care providers would be up for the challenge, too, including Finseth.

"The disease's primary impact is on the ability to move," Finseth said. "Him being able to participate in this race I think says a lot about who he is as a person and the strength he's displayed since his diagnosis."

Morgese said one of his physical therapists, Lindsey Kempinski, asked him while he was undergoing treatment, what his ultimate goal was at the end of his therapy.

"She said think big. That's when I set my goal at taking part in this race. She wrote it down and she said she will run it with [me]," Morgese said. "She was there along with about 20 others from Aurora.

"My symptoms came on very fast and were very extreme," Morgese said "Honestly at the time I thought it was MS because of family members. My only hope then was I just wanted to walk normally again. Dr. Finseth pinpointed exactly what is wrong and started me on medications. I walk pretty close to normally now. Much better than I was walking before."

Finseth said part of Morgese's care includes medications that help replace the chemicals in the brain that are involved in movement and that are depleted by his disease.

"We try to replace those evenly throughout the day so we can minimize the number of symptoms he has," Finseth said. "He has a severe and, unfortunately, progressive condition and a typical prognosis is about 10 years from diagnosis to death, but I think with how well Santino's done and his continued dedication to maximizing his treatment and his health, I think he very well may have a better prognosis than the average that is typically quoted for his disease."

The Terrain Race included many parts—rope wall climbs, monkey bar obstacles, mud pits and more.

"This race means more to me than I can express in words," Santino said. "This event has grown into something much bigger than myself and what I'm going through. In the blink of an eye, I was losing everything. I remember thinking the one thing I would give anything for was to be able to walk normally again. I never thought in a million years I would be walking, running and biking again. Being diagnosed with a Parkinson's disease has made a positive impact on my life. I have met so many incredible people who have shown me support, love and compassion. The people I met have given me hope that I can lead a normal life."

Many Aurora employees who have had a hand in Morgese's story joined him at Little Switzerland for the Terrain Race. "I am feeling better," Morgese said. "It is definitely all thanks to the therapists I've been working with and my doctor. My symptoms have been made a bit more manageable. It's allowed me to do some of the physical activities now that I enjoyed before.

"I'm taking medications. I work out an hour every day. The therapists and doctor really try to push me to have more physical activity. I do boxing on Tuesdays and Thursdays. I'm part of a boxing program. Monday, Wednesday and Friday I work out with my personal trainer."

Race officials say on the website the obstacles at Little Switzerland were designed so you can conquer them on your own but it's always nice to have a teammate help push you over these huge walls.

"Even the competitive athletes will struggle and instead of a penalty when you can't conquer an obstacle, you just keep trying until you do," said the event's website. "Part of the difficulty is we won't post a map until race day. With surprises around the corner the race becomes more challenging but we will have a huge map for you to study right before the start cannon goes off."

Morgese said the thing he has kept telling himself throughout his ordeal is to celebrate the small victories.

"Whether it's you sit up off of a chair without using your hands or taking that first step of walking, or going up a flight of stairs and reaching for something because you are afraid you will fall over," Morgese said. "I would tell people don't give up your life. Today it's a whole new ball game in the field of medicine. Every day find something new you are able to do, whether it's big or small."

Big and Loud

LSVT Big and Loud Clinic® For People Living with Parkinson's Disease

- Evidence-based exercise program that follows an intensive and specific protocol to provide maximal results
- Specialized treatment from certified therapists for Parkinson's disease
- This treatment has been linked with better outcomes compared to traditional therapy

- Patients learn how to move BIG and speak LOUD on a consistent basis
- Recalibrates the senses for automatic use of normal movement and voice
- Uses high effort and intensive treatment to improve everyday function



"You all made a difficult time easier for me. I came away with a better attitude and more hope." -Jerry D., Big and Loud program participant

PD Self Seminar

Aurora Health Care will be launching the PD Self program in September 2018. This innovative program was first developed in Denver, Colorado in 2013. Due to its great success, it is being expanded to nine additional cities and Milwaukee was selected to take on the program in 2018. PD SELF is an eight-module course designed to help those recently diagnosed with Parkinson's disease and their care partners better manage living with the disease. The program uses the principle of self-efficacy, which is "the belief that we can achieve influence over the conditions that affect our lives."

The eight-session curriculum will include a series of learning lectures on various Parkinson's-specific topics, such as symptoms, exercise, and medication. It will also focus heavily on small-group interactions to share ideas and feedback for disease management and overcoming challenges. Finally, there will be a large emphasis on goal setting throughout the program, empowering the participants to continually seek out and achieve reasonable goals.

"The belief that we can achieve influence over the conditions that affect our lives."

The course will be instructed by Kiersten Kirking, a physical therapist from Aurora St. Luke's Outpatient Neurologic Department, and Chris Banadt, a former nurse and military drill sergeant who has had Parkinson's for several years. For more information about the course, please contact PDSelf@aurora.org or 414-646-2424.

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To learn more click here: aurora.org/neuro

