

## OUR EXPERT CARE

The Spinal Stimulation Center at United Hospital provides Spinal Stimulation therapy as part of a comprehensive, multimodality, multidisciplinary treatment program for optimal control of chronic pain symptoms and restoration of function.

The Spinal Stimulation Center is a collaboration between Neuroscience United, United Pain Center and United Neurosurgery Associates.

### About Neuroscience United

Neuroscience United at United Hospital is renowned for the comprehensive range of neuroscience centers and services for patients with disorders affecting the brain, spine and peripheral nervous system.

### About United Pain Center

United Pain Center is a United Hospital-based outpatient clinic and provides comprehensive services using a multidisciplinary approach for individuals experiencing chronic pain. The United Pain Center is accredited by the American Academy of Pain Management.

### About United Neurosurgery Associates

United Neurosurgery Associates is dedicated to the care of patients with neurological disorders. The neurosurgeons at United Neurosurgery Associates are renowned for their expertise and technical skills. They have access to innovative and state-of-the-art techniques and equipment through the Nasseff Neuroscience Center of United Hospital.



**Front Row (L-R):** Chris Timm-Hughes, RN, ANP and Margaret Guthrie, MD **Middle Row (L-R):** Carol Dressen, LSW; Una Edwardson, RN, ANP; Kathy Russell, RN; Angelito Sajor, MD; Todd Hess, MD and Penny Hodges-Goetz, NP **Back Row (L-R):** Gamaliel Batalla, MD; Katie Johnson, Peter A. Pahapill, MD, PhD and Robert Tolles, PhD, LP

### Leadership

Peter A. Pahapill, MD, PhD  
Medical Director,  
Neurorestoration Center  
United Neurosurgery Associates

Todd M. Hess, MD  
Medical Director,  
United Pain Center

*Allina.com is a health information Web site that provides in-depth medical information along with local information about doctors, services, support groups and classes. Please call the Allina Contact Center at 1-866-904-9962 toll free for more information.*

### Location and Parking

United Hospital is located in downtown St. Paul, near the Cathedral of Saint Paul and Capitol Hill. United is easily accessible from I-35E (north and south), as well as the Marion and Kellogg exits from I-94 (east and west).

Patients, families and visitors may park in one of four ramps. All ramps are connected to United Hospital by underground corridors. United Hospital also offers valet parking from 6 a.m. to 6 p.m. Monday through Friday at the front entrance of the hospital and from noon to 10 p.m. at the entrance to the Emergency Department.

## NEUROSCIENCE UNITED

United Hospital  
333 North Smith Ave.  
St. Paul, MN 55102  
651-241-8000  
[www.unitedhospital.com](http://www.unitedhospital.com)

10/09 © 2009 Allina Health System  
© Allina, the Allina logo and Medformation are registered trademarks of Allina Health System.

## NEUROSCIENCE UNITED Neurorestoration Center

# Spinal Stimulation Center

Chronic Pain

## COMPREHENSIVE SPINAL STIMULATION PROGRAM FOR CHRONIC PAIN

The Spinal Stimulation Center at United Hospital provides Spinal Stimulation therapy as part of a comprehensive, multimodality, multidisciplinary treatment program for optimal control of chronic pain symptoms and restoration of function.

This minimally-invasive therapy can effectively suppress many of the debilitating symptoms resulting from many different causes of chronic pain.

Chronic pain affects approximately 25 percent of the U.S. population (almost 100 million people) and Spinal Stimulation therapy can be effective for the majority of patients that are good candidates.

Patients experience a considerable reduction in their symptoms and may be able to reduce medication intake and get their life back.

## MEDICAL PAIN MANAGEMENT



### Todd M. Hess, MD

- Medical Director, United Pain Center
- performs interventional procedures and consultations/evaluations for pain management

#### A commitment to personalized care

The team at United Pain Center develops ongoing, individualized medical programs tailored to each patient, and works with Dr. Pahapill to determine potential candidacy for Spinal Stimulation therapy.



### Peter A. Pahapill, MD, PhD, FACS, FRCSC

- Medical Director, United Neurorestoration Center
- performs Spinal Stimulation procedures at United Hospital.

#### A commitment to personalized care

Dr. Pahapill personally interviews and examines each patient for possible therapy and is involved with all aspects of Spinal Stimulation care after implantation, both in the short- and long-term.

If Spinal Stimulation therapy is recommended, an individualized treatment plan is tailored to patient, family and caregiver goals within a comfortable, supportive and caring environment and in consultation with their primary care and other providers.

#### Professional expertise

- performed 1000+ neuromodulation procedures
- authored numerous medical articles; lectured extensively on neuromodulation
- only neurosurgeon in the midwest with multi-year fellowship training in all aspects of Spinal Stimulation care, including determining candidacy, all implant procedures and post implant care, including programming

## WHAT IS SPINAL STIMULATION THERAPY?

Spinal Stimulation is an advanced therapy designed to relieve certain types of chronic pain. It is not a cure, however it may reduce pain to a manageable level, allowing for a return to a more functional lifestyle with less need for medications.

#### How Spinal Stimulation works

For spinal stimulation to manage chronic pain, leads are implanted in the epidural space of the spine and connected to an implanted power source.

Spinal Stimulation systems look and work a lot like pacemakers; they are sometimes called “pacemakers for pain”. A Spinal Stimulation system generates mild electrical pulses and sends them to nerves along the patient’s spinal cord. These electrical signals are thought to mask the transmission of pain perception, replacing them with a gentle massaging sensation.

#### The Stimulation trial

Patients considering spinal stimulation therapy can undergo a stimulation trial, under the care of a pain physician, to help determine if Spinal Stimulation is a good option for the patient.

A test lead is placed and connected to an external power source that delivers stimulation similar to a fully implanted system.

If it works, the patient is not committed to the therapy, but can make an informed decision about whether they wish to add the spinal stimulation therapy to their overall chronic pain treatment plan.

All are brief outpatient procedures with sedation and no general anesthesia, allowing early return to work.

Once implanted, the system can be adjusted at home or office, or removed if desired. The effects are completely reversible.

## WHY NEUROSCIENCE UNITED FOR YOUR SPINAL STIMULATION AND CHRONIC PAIN NEEDS?

1. **The United Pain Center is accredited by the American Academy of Pain Management**

As a crucial part of the United Spinal Stimulation Center, United Pain Center is accredited by the American Academy of Pain Management, signifying the center has been surveyed and found to meet published quality standards.

These standards require meaningful commitment to high levels of quality and concern for the patient as an individual coping with pain and United Pain Center is the only pain program in Minnesota to receive this recognition.

2. **We value a personal, individually tailored, holistic and healing approach to your therapy.**

We offer a vast array of resources and we, as well as our patients, particularly value our personal, individually-tailored holistic and healing approach to our client’s therapy.

We encourage the involvement and participation of your own Primary Care Physician and your other physicians and/or therapists in the development of each individual’s treatment plan.

You will retain your personal identity and won’t be a number, lost in a large institutional system. Your own doctors are encouraged to participate and won’t lose you!

3. **Each patient being considered for Spinal Stimulation therapy is discussed at our weekly combined Neurorestoration/Pain Centers case conferences.**

This allows for all direct treating physicians (including both Medical Directors of the Neurorestoration and Pain Centers) and paraprofessionals to participate in each individual treatment plan. This represents more than 50 years of combined expertise in the latest and advanced therapies for chronic pain management.

## Shona’s Story:

As a special education teacher, Shona LaSalle knows hopeful determination is a big factor in overcoming obstacles in the classroom. And after living with chronic pain for more than three years, it’s that same determination which led to LaSalle’s discovery of Spinal Stimulation Therapy and the return to her quality of life before the pain.



In 2006, LaSalle, 41, experienced a work-related injury that damaged three vertebrae. She underwent a laminectomy, a surgery to remove the lamina, the back part of the vertebra covering the spinal canal, however the surgery was unsuccessful and resulted in residual pain. The pain was diagnosed as reflex sympathetic dystrophy (RSD), a chronic, painful, and progressive neurological condition that affects the skin, muscles, joints, and bones. In addition, she was unable to have natural bowel movements.

LaSalle was eventually connected with United Pain Center and Todd Hess, MD where she began receiving injections to help manage the pain. Despite the injections, LaSalle still needed to take ibuprofen for the pain, so Dr. Hess presented Spinal Stimulation Therapy as another treatment possibility.

LaSalle underwent surgery in January 2010 and has since been able to return to the quality of life she had before the chronic pain. Along with the pain management, the Spinal Stimulation therapy has allowed LaSalle to have natural bowel movements.

“Spinal Stimulation was truly a miracle for me. Now, I am able to enjoy everyday activities more and back doing the things I did before. What’s really wonderful is that I can program the system and set varying levels for different times of the day. It has made a world of difference for me and anyone who may be in a similar situation should know about it,” said LaSalle.

**To learn more, contact us today at 651-241-6555 or 651-241-7246.**

**www.unitedhospital.com** go to *Services and Programs and Neuroscience United*