Chronic pain is classified as severe pain that lingers long after an injury has healed, or as pain caused by disease that does not respond to traditional analgesic drug regimens. Incredibly, it's estimated that approximately 20 per cent of the population is affected by chronic pain. While its causes are not always easily understood, the devastating consequences of chronic pain are plain to see says psychiatrist Dr. Roger Shick, director of St. Paul’s Hospital’s Pain Centre: “I’ve seen people who’ve lost their marriage, their family, their friends and their job. They’re on social assistance and they’re living in a single room because they are suffering from chronic pain.

“The pain doesn’t directly kill people,” says Shick, “but it does cause depression and a significant number of people commit suicide. It is a life-and-death and a quality-of-life issue.

Chronic pain has numerous causes, affects young and old and takes dedication and persistence to treat. Arthritis, migraines, car accidents and sporting injuries, bad backs, heart disease, cancer, nerve damage, fibromyalgia and diabetes are just a few of the health conditions that can trigger the chronic pain response.

The Pain Centre
For people living with chronic pain across British Columbia and the Yukon, St. Paul’s Pain Centre provides a welcome respite from the suffering. By the time they arrive at the centre, many of these patients have been on the waiting list for the program for a year. Further, many have been dealing with their pain problem for at least eight years. More than 80 per cent of the people who come to the Pain Centre are depressed or anxious and many survive day to day on antidepressants and sleeping pills.

When the Pain Centre was first opened in 1986 by Shick and Dr. May Ong, it offered a weekly, half-day outpatient service. Today it is a leading centre that delivers inpatient and outpatient care, runs teaching programs to improve the level of chronic pain management throughout the Lower Mainland, and conducts leading-edge research to better understand and manage chronic pain. Current research projects include: using imaging technology to identify how diabetic pain presents in the brain; managing severe cardiac pain through neuromodulation; and measuring emotional changes such as anxiety and depression in patients of the centre’s Day Program.

Treating pain is not just about sourcing the right painkillers. Providing practical and emotional support and developing individual pain-management programs are as important as any pharmacological or high-tech intervention.

“Freedom from Pain
St. Paul’s Pain Centre provides hope, relief and improved quality of life for people across B.C. and the Yukon whose lives have been ravaged by chronic pain”

For most of us pain is an irritating but infrequent visitor – one that’s quickly dispatched using over-the-counter medications. However, for many, pain is a constant, debilitating and life-consuming presence that affects every aspect of their lives. It is for these people that St. Paul’s Hospital’s Pain Centre has become a welcome resource in the pursuit of effective pain management for a fuller and happier life.

“We do say to folks, ‘if you’re looking for a cure, you’re probably not going to find one’ but what we’re giving is hope to our patients. They have to wake up every day and deal with chronic pain and still run their lives, which is why I quite unabashedly call them heroes and why it is an honour for us to help them.”

— Dr. Roger Shick, Director, St. Paul’s Hospital’s Pain Centre

The Pain Centre’s multidisciplinary team includes anesthesiologists, psychiatrists, physiatrists (rehabilitation physicians), social workers, nurses, radiologists, pharmacists, physiotherapists and occupational therapists, and an internist. Shick says that the team doesn’t just focus on the biological factors involved with pain. They also pay close attention to social and psychological factors to ensure their patients are better able to meet their health challenges.

“We try to optimize their medication as well as optimize their coping abilities,” says Shick. “It is not necessarily a cure but it diminishes their pain significantly.”

The Chronic Pain Day Program is one of several services offered by the centre. Referral patients meet with different members of the team, who help them to develop their pain-coping abilities. By improving their sleeping patterns and habits, pacing themselves and developing fitness routines, regaining their social life and learning to be assertive and even using humour, patients can take more control of the pain and feel more confident in their dealings with health professionals outside the centre.
HEALING A LIFE INTERRUPTED
How neuromodulation took away the pain and restored the dreams of a promising student

Jocelyn Tomkinson, 29, was an ambitious science student studying molecular biology at SFU when she was struck down by pain in spring 2004. Her studies were put on hold, and the next 10 months were spent visiting various specialists, all of whom predicted a grim future.

“Every new doctor I saw said, ‘This is permanent and you shouldn’t really expect it to get any better,’” recalls Tomkinson, who was born with a congenital spine disorder. “It was really, really hard because I wanted to be a doctor and to me this was just a loss of any potential I was going to have in my life.”

A friend told Tomkinson about St. Paul’s Pain Centre and after joining the waiting list, she eventually got an appointment. After trying different drug therapies without success it was decided Tomkinson would be a good candidate for neuromodulation.

Doctors trialed several intraspinal medications with Tomkinson—the first treatment that really tackled the pain with few side effects. Based on her good response to these medications, it was decided to implant a permanent pump to deliver these medications. After the surgery it took about a year and many follow-up visits to fine-tune the pump to ensure Tomkinson was alert for morning classes but received enough pain medication in the evening when she needed it.

Tomkinson is not only grateful for the medical expertise but also the compassion she received from team members the moment she walked through the doors: “When I go to the Pain Centre it is like talking to friends. They are so human and so approachable and they deal with patients with such humanity and grace.”

Like many Pain Centre patients, Tomkinson was able to get back to her normal life—she returned to her studies the same semester the pump was fitted. She is now working on her master’s in public health and also works as a research co-ordinator for a study into maternity care at BC Children’s Hospital. Tomkinson recently had an article accepted for publication in the renowned medical journal The Lancet.

Tomkinson’s dream is to work on global health projects for an organization like UNICEF. It’s a dream that would not have been possible without the expertise of the team at St. Paul’s Pain Centre.

“I thought I had lost my life,” she says. “I tell people that I live in the bonus time because I never thought I would get back to being this well.”
Some patients living with chronic pain need more drastic intervention before they find some level of relief. For these individuals, the Pain Centre’s Neuromodulation Program, which has received funding from donors to St. Paul’s Hospital Foundation, is at the forefront of chronic pain treatment. The program offers two options depending on the source of the pain: intrathecal medication pumps or spinal cord stimulators. Both are implanted permanently under the skin in the abdomen and are controlled using external touch-screen wireless controllers. The intrathecal pumps are about the size of a bicycle bell and deliver drugs via a catheter directly to the space around the spinal cord.

“The reason we put these pumps in rather than treat patients with pills or shots is that this pain is so bad that pills or shots don’t work or the side effects they experience are so bad,” explains Dr. William McDonald, an anesthesiologist for the Neuromodulation Program.

“The great thing about the pumps is that the drugs are between 100 and 300 times more potent when you give them into the spinal fluid, so we can use much lower doses than when taken orally.”

Instead of delivering drugs, the stimulator delivers an electric current to a specific area of the spinal cord. It lessens pain by reducing the number of painful impulses that reach the brain. The stimulator, which is about the size of a compact cellphone, can be finely tuned to match the needs of each patient and (unlike with drugs) there are no side effects.

While this level of intervention may sound a little frightening, not to mention that patients who participate in the program must commit themselves to a lifelong relationship with the Pain Centre, it is a welcome resource for people who have not been able to find relief from pain through any other means says Louise Malysh, clinical nurse specialist for the pain team.

“By the time we see a lot of these folks they have been in pain for years, so they are totally de-conditioned physically and beaten down mentally,” says Malysh. “We’ve had some really amazing stories and some of our patients have said it has been life-changing for them. If you can give people back some normalcy in their lives, it’s absolutely wonderful.”

For the hundreds of people dealing with chronic pain who seek help from the Pain Centre every year, and the impact from the work done, the centre has been nothing short of life altering. Patients who had previously been physically debilitated by pain have been able to leave their wheelchairs behind, while for others effective pain management has allowed them to get back to work or get out of bed and return to doing the things they used to love to do. Many people have been able to regain their independence and return to playing an active role in family life – some even going on vacation for the first time in years. For others the expertise available at the Pain Centre simply means they are now able to get through the day without being drained of strength or the will to live.

“We do say to folks, ‘if you’re looking for a cure, you’re probably not going to find one’ but what we’re giving is hope to our patients,” says Shick. “They have to wake up every day and deal with chronic pain and still run their lives, which is why I quite unabashedly call them heroes and why it is an honour for us to help them.”

For more information about St. Paul’s Pain Centre go to www.paincentresph.com

Photographs: Brian Smith; (pain pump) courtesy of Medtronic