SOUTHWESTERN NEWS

Media Contact: Mindy Baxter
214-648-3404
melinda.baxter@utsouthwestern.edu

CANNON NAMED UT SOUTHWESTERN NEUROLOGY CHAIRMAN

DALLAS – Oct. 3, 2002 – Dr. Stephen Cannon, a neurologist at Massachusetts General Hospital and neurobiologist at Harvard Medical School, has been named chairman of neurology at UT Southwestern Medical Center at Dallas.

A noted authority on nerve-cell function, Cannon will lead a major expansion of the department's brain research activities and clinical programs.

"Steve Cannon represents a rare combination of a leading neuroscientist and an outstanding clinician," said Dr. Kern Wildenthal, UT Southwestern president. "His scientific expertise will bring major strengths to our research programs and his clinical skills will add a new dimension to our patient-care activities."

Cannon has focused on how ion channels regulate the electrical excitability of nerve cells and how defects in the ion channels can lead to human disease. Defective ion channels have been implicated in a number of disorders, including neuromuscular disease, certain migraine headaches, some fatal cardiac arrhythmias and some forms of epilepsy.

In addition to continuing his research on disorders of nerve excitability at UT Southwestern, Cannon plans to launch programs in autoimmune diseases, neurodegenerative diseases such as Alzheimer's and Parkinson's diseases, regeneration and repair of nervous system cells, spinal-cord injury, and neuro-imaging.

"One of the reasons I came here is the enthusiasm the whole institution has for neurological sciences and its commitment to substantially increasing this effort," Cannon said. "All the stars are beginning to align across different disciplines, and I'm excited about the possibility of interdisciplinary collaboration."

In his most recent study, published in the July issue of *Molecular Cell*, Cannon and his colleagues reported that the excessive spontaneous muscle activity that is common in some cases of muscular dystrophy is caused by faulty chloride conductivity, a discovery that gives scientists a major clue to the disease.

(MORE)

Too many copies of a repeated sequence in the genetic code cause myotonic dystrophy, the most common form of muscular dystrophy in adults. Instead of having less than 50 copies of a DNA sequence, called a CTG triplet repeat, people with the disease can have hundreds or even thousands of copies, effectively clogging the processing of genetic information. The symptoms of patients with myotonic dystrophy include muscle wasting and stiffness, the latter of which is caused by excessive excitability of muscle cells.

"Electrical signaling has evolved as a biological adaptation for how to send information rapidly over elongated cells such as muscle or nerve," Cannon said. "Since communication is the brain's job, understanding how it works – or doesn't work – is vital."

Cannon says he's seen firsthand what's possible when research and clinical care are paired. "The Department of Neurology at UT Southwestern is already an excellent one clinically," he said. "It is an efficient, effective and strong clinical practice. The possibilities for translational research are immense."

The department will be housed in new facilities located in a 16-story, 760,000-square-foot building under construction on UT Southwestern's North Campus. Cannon plans to recruit as many as 10 new investigators and clinicians.

Cannon, who will be the first holder of the recently established Linda and Mitch Hart Distinguished Chair in Neurology at UT Southwestern, received bachelor's and master's degrees from Washington University in St. Louis. At Johns Hopkins University School of Medicine, he earned both a medical degree and a doctorate in biomedical engineering in 1986. Cannon completed a residency in neurology at Massachusetts General Hospital, where he served as chief resident, before joining the neurology and neurobiology faculty at Harvard Medical School.