An Integrated Approach to MS Research and Care

The 2007 John Dystel Prize for Multiple Sclerosis for Dr. Howard L. Weiner

BY MARCELLA DURAND
Photographs by Christopher Navin

MS treatment and care might be very different today without the work of Howard L. Weiner, MD, Robert L. Kroc Professor of Neurology at Harvard University. The recipient of this year’s prestigious John Dystel Prize for Multiple Sclerosis Research, Dr. Weiner has left his mark on almost every aspect of the field—from improvements in magnetic resonance imaging (MRI), to the search for an oral drug, to long-term studies of people living with the disease.

But he does not merely integrate different kinds of research. In 1999, Dr. Weiner established Partners MS Center at the Brigham and Women’s Hospital in Boston, Massachusetts, one of the first MS clinics to fully combine patient care and clinical science.

Several clinical trials are in progress at the Center, including CLIMB
(Comprehensive Longitudinal Investigation of Multiple Sclerosis at Brigham and Women’s Hospital), a long-term study of how MS changes over time. Patients at the Center who are participating in research receive a range of top-notch services, including choice of medical treatments, MRI imaging specifically for people with MS, and clinical follow-up.

“I think if we’re going to study the disease for the future, we need to do it in integrated centers,” Dr. Weiner said. “It moves our understanding of MS forward and gives people with MS a lot of hope. They can see what’s going on.”

Compassion and identification
Dr. Weiner first became interested in MS while a neurology resident at Brigham and Women’s Hospital. One of his patients was a young man with MS. “He had two children just like I did,” he said. “I was very moved by his condition and felt that this was a disease one could do something about.”

Do something he did. “It’s wonderful to watch Howard decide what’s an important question in MS and go after it.” said Dr. Jack Antel, who, along with Dr. Lawrence Steinman, nominated Dr. Weiner for the prize.

A long-term quest
CLIMB is a study that began with one such question: How does MS change over time? So far, more than 600 people with MS are participating—Dr. Weiner plans to include more than 1,000.

“We will follow them for 20 years. We want to know how many develop progressive MS, and whether we can learn to predict who will and who will not. The

Research for tomorrow—Care for today

The John Dystel Prize for Multiple Sclerosis Research is given to a scientist who has made significant contributions to the understanding, treatment, or prevention of MS.

The $15,000 award, given jointly by the National MS Society and the American Academy of Neurology, is funded by the Society’s John Dystel Multiple Sclerosis Research Fund. Oscar Dystel, National Board of Directors honorary life member, and his late wife, Marion, established the fund to honor their late son, John, a lawyer whose promising career was cut short by progressive MS. The prize has been given every year since 1995. To learn more, visit nationalmssociety.org/dystelprizewinners.

In 2003, the Dystel family established the John Dystel Nursing Fellowship in MS to increase the number of MS-trained nurses. The pioneering, three- or six-month education program offers nurses intensive experience with the many effects of MS so they can provide better care day to day. The Dystel Fund also supports three-day training programs for nurses caring for people with MS in long-term care facilities. In 2007, this program will be offered to nurses at Veter-
An inspiring mentor

“Howard Weiner brings science to the bedside every day,” said Dr. Stephen Hauser, who heads research on MS and genetics at the MS Center, University of California, San Francisco, “and what he learns at that bedside he brings back to the laboratory.” Dr. Hauser is one of many top researchers in the MS field who were trained and mentored by Dr. Weiner; some of the others include three leading researchers at the Center for Neurologic Diseases at Harvard Institutes of Medicine: Drs. David Hafler, Vijay Kuchroo, and Samia Khoury.

“He was a real model for me,” said Dr. Khoury, who works with him today at the Partners Center. “I’m doing many things like him—I do basic research and clinical research and I see patients.” She added, “He is a wonderful mentor and a wonderful human being—he really cares about finding a cure for MS.”

challenge in MS is that it’s chronic and heterogeneous—meaning it varies from person to person. So how do we deal with that? We’re hoping to find some answers.”

A personal connection

This award is not Dr. Weiner’s first contact with John Dystel. “I was called by the family to see him,” Dr. Weiner said. “I remember examining him and thinking through what we could or could not do for him at that time. If it had been today, I wonder how much more we might have been able to help him.” John Dystel died from severe MS complications in June 2003.
Let’s get into treatment!
Dr. Hafler remembers editing a small textbook about MS in the 1980s. There was no chapter on treatment.

“Howard played a major role in introducing the concept of ‘let’s get into the treatment of the people who have this disease,’” Dr. Hafler said. However, Dr. Weiner also asked how treatment could be done in a way that would be easy to live with and have long-acting effects. His search for oral therapies and vaccines for MS continues to this day.

Every MS topic
“Dr. Weiner told me years ago, ‘I just want to know what causes MS before I die,’” Dr. Hauser said. This powerful desire has led him to inquire into virtually every stage of MS and to conduct research on topics ranging from causes to cures. He was the first to develop the concept of three cures—to stop the disease, to repair all the damage, and to prevent it from ever developing—and he inspires everyone who trains under him to think in more than one dimension.

And writing projects, too
Away from the lab and the clinic, he displays more wide ranging energy. His books for general readers include the riveting Curing MS (Crown, 2004), which chronicles his early search for an oral MS drug. And he has found time to write novels and to make a film on, as he described it, “doctors confronting life’s issues.”

Cure: an abiding vision
At the annual American Academy of Neurology meeting, in May this year, after formal presentation of his Dystel prize, Dr. Weiner spoke on the central challenge of his lifetime: “How Do We Cure Chronic Heterogeneous Disease?”

When he envisions a cure, he said, he thinks of a newly diagnosed 25-year-old today who should be well when she’s 50.

“What are the factors that are going to allow us to keep her healthy?” he keeps asking. The causes of MS are complex and the cures are not yet in hand, so Dr. Weiner continues the search.

Marcella Durand is a frequent contributor to this magazine.