Imagine a clinic where people with multiple sclerosis (MS) don’t have to hunt for parking near the door. A place where patients receive the most advanced diagnosis, treatment and rehabilitation from leading MS specialists—and practice the everyday tasks that MS can make a challenge. This is the UW Medicine Multiple Sclerosis Center (formerly Western Multiple Sclerosis Center), which opened July 2 at Northwest Hospital & Medical Center.

“This comprehensive clinic offers every patient an individualized program with the complete spectrum of treatment resources,” says Annette Wundes, M.D., UW assistant professor of neurology. Wundes co-directs the center with Shana Johnson, M.D., UW assistant professor of rehabilitation medicine. Both are fellowship-trained MS specialists.

Advanced, comprehensive care is essential for optimal MS management. “The right treatment can make a huge difference to patients’ outcomes and everyday functioning,” says Wundes. In addition to neurology faculty Wundes and Gary Stobbe, M.D., patients work with physiatrists such as co-director Johnson and with Kevin Alschuler, Ph.D., UW acting assistant professor in rehabilitation. Alschuler is a psychologist specializing in chronic illness and MS. He can address issues of cognition, mood and non-pharmaceutical management of symptoms such as pain.

The center also includes a vocational counselor, driver training expert and other specialists. Collaboration between UW Medicine and Northwest Hospital allowed the development of this accessible, up-to-date clinic, which offers a street-level drop-off and pickup zone, an infusion suite, access to the newest MRI scanning techniques and a simulated cityscape called “Easy Street” for rehabilitation. The clinic was designed for people with MS and their caregivers. Architects worked with the treatment team to design a convenient and tranquil space.

In 1977, the UW Medical Center was one of the first in the nation to establish a comprehensive MS center. But with time, the facility sprawled across campus. “Patients had to maneuver long distances and sometimes had trouble finding their way,” Wundes says. “The new center has everything in one place.”

MS is highly prevalent in the Northwest. The National MS Society estimates that more than 14,000 people in Washington, Montana, Alaska and northern Idaho live with MS, which also affects patients’ families and careers. “The new clinic will provide better quality of life for people with MS and help them keep working, lowering the social cost of this disease,” says Wundes.

Patients and referring providers benefit from working with MS specialists familiar with the latest therapeutic advances. “The array of MS treatments now available makes neurologists a little like our rheumatology colleagues,” says Wundes. “Traditionally, neurologists have diagnosed MS but haven’t had as many medication options, especially those associated with toxicity,” as some new MS medications are. “We can individualize treatment to a patient’s disease specifics at the new center.”
FROM THE CHAIR

Welcome to the inaugural issue of Neurotransmissions, the UW Department of Neurology newsletter. Since becoming an independent department in 1996, we have grown in size and in the diversity of our activities. The field of neurology itself has become more complex and exciting. Staying connected with one another has never been more important—or more challenging. Thus, we are pleased to have this new way to share information with colleagues, alumni and friends.

Engagement with our readers is the goal. Neurotransmissions must serve your needs. Consequently, its form and content range are not hardwired. As we develop our first issues, your ideas for topics or recurring features will be especially valuable, so please don’t be shy about offering advice.

This issue features UW Medicine’s new multiple sclerosis center. Jointly run by the departments of neurology and rehabilitation medicine, the MS center offers truly comprehensive care in a beautiful new space on the campus of Northwest Hospital and Medical Center. The creation of this new center intensifies our commitment to provide MS patients in the Pacific Northwest with the best care possible.

Each issue of Neurotransmissions will also feature faculty and staff. “Faculty Achievements” will keep you up to date on faculty awards, honors and especially significant publications. In “Featured Faculty,” we will focus on individual faculty members to provide more in-depth surveys of professional contributions. This issue highlights the extremely important advances in muscular dystrophy that have come from the laboratory of Jeff Chamberlain, Ph.D.

“From Our Residents” offers a view of our outstanding training program and news of current residents and fellows. We cordially invite our alumni to share their adventures and successes (“For Alumni”). In addition, we will bring you some special features. Phil Swanson, M.D., Ph.D., a UW Medicine faculty member since 1967, is interviewed in this issue for “Impulses,” a column that focuses on history this fall.

As you review the first issue of Neurotransmissions, you might wonder, “What took you so long?” Primarily, the delay came from a vague sense that we were already communicating effectively about important departmental events. The truth is, living in the “information age” does not guarantee that we receive the most relevant news. There is simply too much of it from too many sources. To help make future issues of Neurotransmissions as relevant as possible, I am counting on you for suggestions. It is our hope that this newsletter will become an essential, enjoyable source of information you can use.

Sincerely,

Bruce R. Ransom, M.D., Ph.D.
Warren & Jermaine Magnuson Professor and Chair
Department of Neurology
The new center also offers leading-edge diagnosis, including electrodiagnosis, spinal tap and the expertise to rule out MS mimics such as neurosarcoidosis. “We will see any patient with suspected MS,” says Wundes. “The center works with many community providers, including neurologists and primary care physicians.” Providers can call with questions or refer patients for second opinions or collaborative care.

“Many people with MS need different types of care at the same time,” Wundes says. “This can overwhelm a community clinic.” The center’s resources include support groups, monthly patient education classes and nutrition counseling. The MS center works closely with the National Multiple Sclerosis Society (NMSS) to maximize community support for patients and to advance community and peer education. Wundes serves on the NMSS board of trustees and chairs its 2013 regional summit.

The center is also committed to research. Ongoing projects include a study of stem cell therapy for patients with aggressive MS who don’t respond to standard treatment, in partnership with researchers at Fred Hutchinson Cancer Research Center. Neurology faculty also work with Department of Rehabilitation colleagues studying quality of life in the UW Medicine MS Rehabilitation Research and Training Center. Ultimately, this is the goal of the MS center and its specialist teams—making life for Northwest residents with MS as good as possible. To learn more about the UW Medicine Multiple Sclerosis Center, visit http://www.uwmedicine.org/ms

Contact information:
Multiple Sclerosis Center
1536 North 115th Street
Suite #130
Seattle, WA 98133-9733
206.598.3344

About Our Pediatric Neurology Residency
This is a five-year categorical program linked to the UW School of Medicine pediatrics program. It includes two years of general pediatrics, integrated training and education through the school’s core neurology residency program and extended, intensive training in pediatric neurology at Seattle Children’s. Slots are filled through the National Residency Matching Program.

2012 Awards to Residents
John Jefferson, M.D., class of 2012, received the Harborview Medical Center Housestaff Achievement Award for Clinical Ability and Humanitarian Concern. One resident each year receives this award based on nominations and selection by a committee.

Anitha Raghunath, M.D., class of 2013, received the Dr. Alexander Spence Award, given each year to a neurology resident who shows exceptional dedication in neuro-oncology patient care.
ALS Study Funded
Michael Weiss, M.D., has received two awards to fund a two-year, Phase 2 multicenter randomized controlled study of the drug mexiletine for amyotrophic lateral sclerosis (ALS). Awards include $355,328 from the Northeast ALS Consortium and $740,630 from the ALS Therapy Alliance. The study will enroll 60 patients at 10 sites beginning in November 2012.

Faculty Member Joins National Committee
Nathaniel Watson, M.D., was appointed to the executive committee of the American Academy of Sleep Medicine (AASM) in June 2012. With more than 10,000 members, the AASM is the world’s largest sleep physician membership organization.

2012 Teaching Awards
Mike Kim, M.D., received the Adult Neurology Teacher of the Year Award and John Kuratani, M.D., received the Pediatric Neurology Teacher of the Year Award for work with Department of Neurology residents.

Seattle’s Top Doctors Include Neurology Faculty
Neurology faculty are frequently named to Seattle Magazine’s list of Top Doctors. The 2012 list includes Kyra Becker, M.D., Marc Chamberlain, M.D., Sidney M. Gospe, Jr., M.D., Ph.D., Edward Novotny, M.D., and Ali Samii, M.D. Kudos to our faculty members for this recognition from the Seattle community.

UW Medical Center Honors Faculty for Service
Several neurology faculty were honored at the annual UWMC Employee Service Awards celebration. Nigel Bamford, M.D., and Jonathan Weinstein, M.D., Ph.D., were recognized for 10 years of service, while Andrea Cheng-Hakimian, M.D., Marc Chamberlin, M.D., and Gene Hu, M.D., Ph.D., marked their five-year service milestones.

Alumni at the AAN?
Would you like to attend an alumni event at the American Academy of Neurology? The 65th annual meeting is March 16-23, 2013, in San Diego, Calif. If you’re interested, email schadm@uw.edu.

Neurology History Project
Sandeep Khot, M.D., M.P.H., Will Longstreth, M.D., and Phillip Swanson, M.D., Ph.D., are gathering department history and conducting interviews with former trainees. To learn more, email skhot@uw.edu.

Contribute to Neurotransmissions
We want to hear from you! Send us a note about your professional or personal pursuits. Photos are welcome—just be sure to identify everyone. Edited contributions will appear in print and on our website.
Jeffrey Chamberlain, Ph.D.

There is hope for children with muscular dystrophy (MD), thanks to Department of Neurology investigator Jeffrey Chamberlain, Ph.D. His lab is planning one of the first human clinical trials of gene therapy for MD. A member of the neurogenetics division, Chamberlain says he “first heard about MD as a kid, watching the Jerry Lewis telethons.”

Chamberlain earned his Ph.D. in biochemistry at the University of Washington with mentor Stephen Hauchka, Ph.D. In postdoctoral work, he studied animal models of MD and ways to develop therapeutics.

His early work led to a post at the University of Michigan, then a gene therapy center. With colleagues, he submitted a grant to the National Institutes of Health that became the first NIH-funded gene therapy program project. In 2000, Chamberlain returned to the UW School of Medicine, where he holds the Bruce and Jolene McCaw Chair in muscular dystrophy.

The Chamberlain lab uses adeno-associated virus (AAV), which infects humans without causing disease, to transport healthy copies of MD genes from capillaries into skeletal and heart muscles. “Delivery into the bloodstream—not thousands of intramuscular injections that wouldn’t reach the deep muscles anyway—is the Holy Grail of muscle therapy,” says Chamberlain. “We don’t have the ultimate solution, but we’re close enough to start learning how it works in humans.” The approach could also help people with amyotrophic lateral sclerosis (ALS) and other disorders.

The team has laid extensive groundwork for a human trial of therapy for Duchenne muscular dystrophy (DMD). DMD, the most common form of MD, results from dystrophin gene mutations. “Dystrophin is the largest gene in nature,” Chamberlain says. “AAV is small and easy to work with, but also carries a small payload. We’ve worked for years to understand dystrophin’s structure and create a microdystrophin that fits into AAV.”

The trial is expected to start within two years and involve the Seattle Children’s MD clinic, Department of Neurology clinicians and investigators at Fred Hutchinson Cancer Research Center. “It’s a long way off, but we see light at the end of the tunnel,” Chamberlain says.

The recipient of an NIH Merit Award, Chamberlain sits on the Scientific Advisory Committee of the Muscular Dystrophy Association. He is also active in the American Society for Gene and Cell Therapy and many other organizations.

Along with the McCaws, former Seattle Mariners designated hitter Edgar Martinez supports Chamberlain’s work with an annual charity golf tournament.

To learn more, visit http://depts.washington.edu/chamlab

From left, Jeffrey Chamberlain, Ph.D., Bruce and Jolene McCaw chair in muscular dystrophy, former Seattle Mariners star Edgar Martinez and Alex Dieffenbach, vice president of the Muscular Dystrophy Association, at the Edgar Martinez Golf Classic to support development of a treatment for Duchenne muscular dystrophy.
impulses features a variety of department topics, from history to special events. if you have a topic idea for impulses, please contact us at neurogr@uw.edu.

Q.: who first led the division of neurology?
Dr. swanson: Fred Plum, M.D., was the first division head and first neurologist hired by the university of Washington. He helped coin the term “persistent vegetative state,” and was instrumental in founding the Annals of Neurology. Plum left in 1963 to become chair at Weill-Cornell Medical College. Charles Luttrell, M.D., was recruited from Johns Hopkins to replace Plum, but died after just one year. (He brought Coldevin Carlson, M.D., to lead pediatric neurology.) August Swanson, M.D., Res. ’58 (no relation), became head in 1964. He became associate dean of medicine in 1967 and I became division head.

Q.: What were some of the first faculty known for?
Dr. swanson: Jerome Posner, M.D. ’55, is considered a founder of neuro-oncology. When I became division head, Harborview had no full-time head of neurology, so we appointed S. Mark Sumi, M.D. Wayne crill, M.D. ’62, became head of neurology at the Seattle Veterans Administration (VA) Medical Center, where we acquired funding for an epilepsy center. We also established a neurochemistry lab at the VA under William L. Stahl, Ph.D.

Crill was succeeded at the VA by Thomas Bird, M.D., who established the first neurogenetics clinic in the country. He helped delineate the neurogenetics of several diseases, including Alzheimer disease and hereditary neuropathies. In 1971, Donald Farrell, M.D., added his expertise in lipid storage diseases to the neurochemical group. In 1974, we recruited Alex Spence, M.D., who established neuro-oncology here.

Q.: Could Division of Neurology alumni find the same labs and offices today?
Dr. swanson: Yes. When I arrived in 1964, we had an office and two laboratories that were here in Plum’s time. While I was division head, we moved into the space we’ve occupied ever since. When chair Bruce Ransom, M.D., Ph.D., came in 1995, we acquired labs in other campus buildings. We invite alumni to visit and share their recollections.