Greetings UW Rehabilitation Medicine friends and colleagues,

I am pleased to announce UW Medicine’s plan to relocate our Multiple Sclerosis (MS) services to Northwest Hospital (NWH) and Medical Center by June 2012. Several space options were considered when trying to determine where to relocate the program. The NWH campus was the most logical choice, primarily for its accessibility (e.g. parking, proximity of related services, etc.). We look forward to creating a more patient-centered experience, as well as future program development with the addition of our new faculty member, Dr. Shana Johnson. Read more about the relocation plan on page 3.

Renovations to our research lab at the UW Health Sciences Building were completed earlier this spring. This is where Chet Moritz, PhD and his research team conduct their ground-breaking research for the treatment of paralysis and other movement disorders. In this edition, we have a more in-depth write-up about Dr. Moritz’s research as well as photos of the lab to give you a glimpse into the newly renovated space.

Thank you for your continued interest and support of the department. Contact us at rehab@uw.edu with questions or comments.

Peter Esselman, MD
Professor and Chairman

DR. CHET MORITZ’S INNOVATIVE RESEARCH FOR THE TREATMENT OF PARALYSIS

The department recently completed renovations of the UW Health Sciences Building 8th floor basic science research laboratory (BB-826). This laboratory houses Dr. Chet Moritz, assistant professor, and his research team. Dr. Moritz’s group is currently developing innovative treatments for spinal cord injury by combining electrical stimulation with stem cell therapies.

Newly renovated basic science laboratory, BB826
The team’s approach is based on principles of Hebbian plasticity, the idea that neurons that ‘fire together will wire together’. They aim to promote regeneration by artificially synchronizing neurons in the brain and spinal cord below the injury. Using custom electronics, they record activity from neurons within the brain and route those signals around the injury site to deliver stimulation within the spinal cord below the level of the injury. Specialized microelectrodes, or devices used for brain recordings and spinal stimulation, are also manufactured by the researchers in the new laboratory.

Dr. Moritz’s team, in collaboration with Dr. Phil Horner of UW Neurological surgery, is also exploring whether the aforementioned spinal stimulation can enhance stem cell therapies. These researchers are transplanting neural stem cells derived from adult human tissue in a rodent model of spinal cord injury in order to improve regeneration. Their ongoing work investigates whether this combined therapy can guide neural stem cells to form functional connections across an injury site in hopes of repairing damaged tissue.

The interdisciplinary research team is comprised of medical residents, graduate and undergraduate students, and research scientists from departments and programs across campus including Rehabilitation Medicine, Psychiatry, Neurobiology & Behavior, Electrical Engineering, Bioengineering, and Biology.

Dr. Moritz is also exploring the use of brain-computer interfaces to bypass injuries to the nervous system, such as stroke or spinal cord injury (SCI). He recently demonstrated that activity recorded from the brain could be used to trigger functional electrical stimulation delivered to muscles and restore simple movements of an otherwise paralyzed hand. He is now following up on this discovery and is investigating whether alternative brain areas – even areas unrelated to the original movement – can be used to control a neuroprosthetic device and restore movement to a paralyzed limb. This work is done in the Washington National Primate Research Center here at the UW.

In addition to these pre-clinical studies, Dr. Moritz is also involved in clinical investigations in the department’s Human Motional Analysis Laboratory. In collaboration with Dr. Sarah Westcott McCoy, they are exploring the potential of muscle activity feedback presented in a video game environment to reduce spasticity and improve coordination for children with cerebral palsy, and adults following stroke or traumatic brain injury. Graduate students in the Rehabilitation Science PhD program and a post-doctoral fellow are integral to these studies.

Dr. Moritz’s research is funded by the National Institutes of Health, The American Heart and Stroke Association, the UW Royalty Research Fund and Center for Commercialization, and the Bayley Family Stroke Care Fund in Rehabilitation Medicine.

More information about Dr. Moritz’ research is available at: http://faculty.washington.edu/ctmoritz/main/
MS PROGRAM TO TRANSITION TO NWH BY JUNE 2012

The Department is pleased to announce UW Medicine’s plan to relocate UW Medical Center’s Neurology and Rehabilitation Medicine Multiple Sclerosis (MS) services to the Northwest Hospital and Medical Center campus by June 2012, where it will continue to be a UW Medicine Clinic. The consolidation and relocation of UWMC’s MS patient population from its current locations is necessary for future growth as well as a more patient-centered experience.

The space available at NWH is well-suited to the MS patient population: it is easily accessible on the ground-level of an up-to-date building with ample natural light; parking is in close proximity; and important related services for our MS patients will be available in proximate space including medication infusions, psychology and rehabilitation counseling. The community setting is considered an ideal, patient-friendly location for an MS program. The Department looks forward to the development of this truly collaborative program with a comprehensive approach to MS patient care.

EVENTS: 3RD ANNUAL TBI INTERAGENCY CONFERENCE

The Third Interagency Conference on Traumatic Brain Injury (TBI) funded primarily by the National Institute on Disability and Rehabilitation Research (NIDRR) was held June 13-15, 2011 in Washington DC. The conference was a huge success with over 740 participants, including representation from the military, federal government, private and public universities and hospitals. This gathering covered recent advances in research and clinical care to improve outcomes for persons with TBI including the research conducted by the NIDRR funded TBI Model Systems.

NIDRR provided supplemental funding to Dr. Kurt Johnson’s Model Systems Knowledge Translation Center to provide support and planning for this conference. The Department was one of the sponsors.

To learn more about this conference, visit: http://tbi-interagency-conference.org/.

2011 JUSTUS F. LEHMANN SYMPOSIUM A SUCCESS

The Department of Rehabilitation Medicine sponsors an annual symposium in honor of Justus F. Lehmann, M.D., who chaired the department from its founding in 1957 until 1986. The 2011 JFL symposium focused on aging issues in rehabilitation. We were fortunate to have an outstanding group of speakers share their work and knowledge on a number of topics in the area, including muscle function and training in the older adult, rehabilitation challenges in the older adults with cognitive impairments, pain and aging, and aging with a spinal cord injury. This year’s keynote speaker was Dr. Walter Frontera, M.D., Ph.D, professor of Physical Medicine and Rehabilitation and Physiology at the University of Puerto Rico. Save the date: the next JFL symposium is May 18, 2012.
RESEARCH: SENSORIMOTOR TRAINING FOR BALANCE RESEARCH PRESENTED AT PAWS-ON SCIENCE WEEKEND

A group of rehabilitation researchers under the direction of Sarah Westcott McCoy, PT, PhD, participated in the second Paws-On Science: Husky Weekend held April 8-10 at the Pacific Science Center. The group’s interactive exhibit, “Sensorimotor Training to Address Balance, Engagement and Learning (STABEL),” allowed visitors to experience their therapy game, which aims to help children improve their standing balance. During the game, children pretend to fly an airplane, which they see within virtual reality goggles, while standing on a wobbly board.

The Paws-On Science weekend is an excellent opportunity for the public to learn directly from UW scientists through interactive activities and demonstrations about the amazing research breakthroughs happening right here in Seattle. This year, 18,270 people attended the three day event (more than doubling last year’s attendance).

2011 STOLOV FUND AWARD WINNERS ANNOUNCED

In honor of Dr. Stolov, and his wife, the Walter C. and Anita C. Stolov Research Fund has been established to support research training through research projects within the Department. Congratulations to the 2011 recipients:

- JoAnn Silkes, PhD, CCC-SLP, post-doctoral student, Departments of Rehabilitation Medicine and Speech and Hearing “Timing of Implicit Language Processes in Aphasia.”
- Ellen McGough, PT, PhD, assistant professor, Rehabilitation Medicine, Division of Physical Therapy. “The effect of an aerobic exercise program on cognitive and physical function in older adults with Parkinson’s disease.”
- Patricia Matsuda, PT, PhD, teaching associate, Rehabilitation Medicine, Division of Physical Therapy. “Development and validation of a timed version of the Dynamic Gait Index.”
- Lin-Ya Hsu, MS, PT, PhD student, Rehabilitation Sciences, Rehabilitation Medicine. “Balance reaction to varied sensory inputs in children with and without vestibular dysfunction.”
- Alfred Gellhorn, MD, clinical assistant professor, Rehabilitation Medicine, “Ultrasound as a noninvasive imaging modality in biomechanical analysis of tendinopathy: A pilot study.”
- Sujata Pradhan, PT, PhD, lecturer, Rehabilitation Medicine, Division of Physical Therapy. “Responsiveness of fine motor control parameters to clinical disease progression in individuals with Parkinson’s disease – preliminary work toward development of a clinical progression marker for PD.”

ACCOLADES: C. CORSILLES-SY RECEIVES UWRA SCHOLARSHIP

Cecille Corsilles-Sy, OTR/L, student in the PhD Program in Rehabilitation Science, was recently awarded a University of Washington Retirement Association Scholarship (UWRA) in the amount of $3000.

The award was made in recognition of her aging-related studies. Ms. Corsilles-Sy was one of four selected to receive this award. She was honored at the UWRA Annual Spring Luncheon on April 28th held at the Center for Urban Horticulture.
After an eye opening volunteer experience, Eric Alexander, MD (Resident ’09), established a rehabilitation project to provide wheelchairs and other rehab equipment (prosthetic legs, canes, crutches, braces) and rehab therapies (physical therapy and occupational therapy) to the people of Western Kenya.

In September of 2010, Dr. Alexander spent time with community health workers at a clinic in Western Kenya called Matibabu. After evaluating this private medical clinic, he quickly realized that the rehabilitation needs of the people with disabilities (especially children) were not being addressed in the developing nation. He saw mothers being pushed around in wheelbarrows and children being confined to their beds for years because there was a complete lack of rehabilitation equipment in the area. It was a life changing experience and Dr. Alexander returned to the United States determined to help these people.

Since returning, Dr. Alexander has worked with the Tiba Foundation (an American Organization that is a major contributor to the Matibabu Clinic) and a not-for-profit organization called APDK (Association for Physically Disabled in Kenya) to create a comprehensive, sustainable rehabilitation program. The APDK now manufactures high quality wheelchairs within Kenya, and the government of Kenya has created a subsidy that brings the price of a wheelchair down to $13 to the end user (they cost about $200 to manufacture in Nairobi). The APDK also works with Matibabu’s community infrastructure to provide assessments, fittings, repair services, and locally-manufactured three-wheeled cycles, canes, crutches and prosthetics to the people.

To learn more about Dr. Alexander’s rehabilitation project in Kenya, please visit the Tiba blog:

http://tibafoundation.org/

Dr. Alexander is the Associate Chief of the Physical Medicine & Rehabilitation Department with Kaiser Permanente in Martinez, CA.

**EDUCATION & TRAINING: CONGRATULATIONS PHD IN REHABILITATION SCIENCE PROGRAM GRADUATES**

Congratulations to our recent graduates of the PhD in Rehabilitation Science Program:

- Cheryl Kerfeld, PT, PhD
- Patricia Matsuda, PT, PhD, DPT
- Megan Morris, CCC-SLP, PhD

Dr. Matsuda was selected by the Graduate School as one of four gonfalonieres—banner carriers—to lead graduating masters and doctoral students into Husky Stadium at the UW 2011 Commencement Ceremony. Dr. Matsuda was chosen for her record of outstanding achievement at the UW.

To learn more about the PhD in Rehabilitation Science Program, please visit:

http://rehab.washington.edu/education/
Congratulations to the UW Physical Medicine & Rehabilitation (PM&R) Resident class of 2011. The graduation ceremony was held on June 18, 2011 at the Center for Urban Horticulture.

From left to right:
Ryan Zehnder, MD, John Benson, MD, Mary Nettlow, MD, Ted Claflin, MD, Nesanet Mitiku, MD, Dan Colonno, MD, Kimberly Middleton, MD, & Brandon Messerli, DO

Welcome New PM&R Residents

We are pleased to welcome another group of outstanding residents to the UW Physical Medicine and Rehabilitation (PM&R) Residency training program. To learn more about the program, visit: http://rehab.washington.edu/education/residency/

Incoming R2’s:
Back Row: Jeremy Linsenmeier, MD*, Jake Carlson, MD, Stephen Johnson, MD, Mathew Paluck, DO, & Scott Simpson, MD

Front Row: Tanya Chavez, MD, Shawn Song, MD, Mindy Loveless, MD*, & Felicia Skelton, MD*

*completed R-1 year at the UW

Incoming Interns:
From left to right:
Margaret Jones, MD, Cody Gillenwater, MD, & Jonathan Morrill MD
Faculty News, Awards & Honors:

Faculty Promotions—Effective July 1, 2011

Myron Goldberg, PhD, is promoted to clinical professor. Dr. Goldberg’s expertise is in neuropsychological assessment of persons with acquired brain disorders, and psychotherapy and educational services to patients and family members for adjustment to TBI, SCI, stroke, MS and pain.

James Robinson, MD, is promoted to clinical professor. Dr. Robinson’s clinical interests include the evaluation and conservative treatment of spine disorders, and fibromyalgia. His research interests include the treatment of fibromyalgia and decision-making among patients on chronic opioid therapy.

Debbie Kartin, PT, PhD, is promoted to professor. Dr. Kartin’s research interests include the effects of prenatal exposure to alcohol and other drugs, the development of postural control and balance, and cerebral palsy. Dr. Kartin is the Director of the PhD in Rehabilitation Science Program.

New Faculty Appointments—Effective July 1, 2011

Tom McNalley, MD, is promoted to higher academic rank of assistant professor. His clinical interests are in pediatric rehabilitation, concussion and brain injury, transition of young adults with special healthcare needs, adults with cerebral palsy and post-polio. Dr. McNalley is director of the Chronic Care Clerkship program.

Jelena Svircev, MD, has a new faculty appointment as assistant professor and provider at the VA Puget Sound. Dr. Svircev’s clinical interests include spinal cord injury medicine. Her research interests are related to osteoporosis and fracture management in persons with chronic SCI, and adaptive sports.

Dr. Kanny: AOTA Retired Educator’s Award

Elizabeth Kanny, PhD, associate professor, recently received the Retired Educator’s Award from the American Occupational Therapy Association (AOTA). The award is to acknowledge Dr. Kanny’s exceptional leadership and commitment to the advancement of occupational therapy education. Dr. Kanny was the Division Head for the MOT Program for 28 years, and has 33 years total on faculty in the department.

Dr. Krabak: Medical Staff TLC Award

Brian Krabak, MD, MBA, clinical associate professor, is the recent recipient of the Medical Staff Teamwork Leadership and Caring (TLC) Award. The TLC Award is presented monthly to an outstanding UWMC physician or provider for excellent care, service, teamwork, and leadership. Dr. Krabak was nominated by a patient’s family member who appreciated the thorough and efficient care he provided her daughter.

Dr. Zumsteg Accepts Awards for HMC

Jennifer Zumsteg, MD, acting instructor/senior fellow, was honored to accept two Practice Greenhealth Environmental Excellence Awards on behalf of HMC at the 2011 CleanMed Conference. HMC received both the “Partner for Change Award” and the “Making Medicine Mercury Free Award”. Dr. Zumsteg represented the UW system as a whole for its sustained membership in the Environmental Leadership Circle.

Dr. Kartin: AOTA Retired Educator’s Award

Margaret Hammond, MD, professor, has been appointed as the Acting Chief of Patient Care Services Officer for the National Department of Veteran’s Affairs in Washington, D.C. As Acting Chief PCS Officer, Dr. Hammond serves as the principal advisor to the Deputy Under Secretary for Health for Policy and Services on policy matters and issues that relate to patient care and clinical services.
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blaisr@uw.edu
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http://rehab.washington.edu

UW Department of Rehabilitation Medicine Banner Image by: Janet Schukar

Welcome New Faculty

Christina Hughes, MD, joins the department as an acting assistant professor and provider at the VA Puget Sound Health Care System. Dr. Hughes’s clinical interests are in the areas of multiple sclerosis, stroke and trauma care. She received her medical degree from West Virginia University, School of Medicine. Dr. Hughes completed a physical medicine and rehabilitation residency at William Beaumont Hospital in Michigan and a VA Advanced Fellowship Program in Multiple Sclerosis in Seattle.

Jill Jandreau, MS, PT, joins the department as a teaching associate with the Division of Physical Therapy. She has been a guest lecturer with the department since 2005. Her teaching interests include clinical courses and labs related to therapeutic exercise, functional mobility skills, pediatrics, and patient evaluation. Ms. Jandreau completed a degree in Kinesiology and Physical Education at the University of Maine and earned her Master of Science degree in Physical Therapy from the University of Rhode Island.

Shana Johnson, MD, joins the faculty as an assistant professor and provider at the Western Multiple Sclerosis Center at the UWMC. Dr. Johnson’s main clinical interest is in the area of multiple sclerosis diagnosis, management and rehabilitation. She received her medical degree from the Medical College of Wisconsin. Dr. Johnson completed a physical medicine and rehabilitation residency at the University of Texas Southwestern Medical Center and a multiple sclerosis fellowship at the UIW.

3rd Annual TBI Artist Showcase

Approximately 1,000 people visited the 3rd Annual Traumatic Brain Injury Artist Showcase, Recreating Me: Exploring & Healing through Creative Expression. The UW Traumatic Brain Injury Model System (UW TBIMS) and the Brain Injury Association of Washington (BIAWA) presented the event held May 8 through May 18 at the Museum of History and Industry in Seattle. If you missed the show, a special exhibition of selected art from Recreating Me 2010 and 2011 is on display at the UW Tower (4333 Brooklyn Ave NE) from June 9 - July 29.

The annual TBI art show is an exhibit of multi-media art created by people after a traumatic brain injury which portrays the artists’ stories and perspectives. For more information on the TBI Artist Showcase, please visit the UW TBIMS website: http://depts.washington.edu/uwtbi/Education/artshow.htm

Bret Hart with sister Cass Walker. Brett’s paintings and Cass’s photography were featured in the 2011 showcase.