Greetings UW Rehabilitation Medicine friends and colleagues,

Welcome to the winter edition of our newsletter. As 2010 draws to a close, I would like to thank faculty, staff, students, trainees, volunteers, and friends of UW Rehabilitation Medicine for another strong year of growth, support and commitment to our clinical, teaching and research activities.

To briefly recap, we opened the 2010 year with the completion of our classroom renovation and expansion project, providing state of the art teaching facilities for our students. We also completed and plan additional renovations to the University of Washington Medical Center (UWMC) inpatient unit to improve patient care and accessibility. Over the course of the year, we have added several new fellowship opportunities for our trainees, which we discuss in more detail in this newsletter. We have also welcomed a number of new and outstanding clinical and research faculty members. Finally, our research funding continues to be strong as we are a leader in funding from the National Institutes of Health (NIH) among rehabilitation programs.

It is a pleasure and an honor to be Chairman of this department and I am looking forward to continued successes in the 2011 year.

Thank you for reading. Contact us at rehab@uw.edu with questions or comments.

Please have a safe and happy holiday season.

Peter Esselman, MD
Professor and Chairman

SPOTLIGHT: UW HUMAN MOTION ANALYSIS LAB (HMAL)

The Department of Rehabilitation Medicine has two state of the art Human Motion Analysis Laboratories (HMAL) - one lab is located at the Veteran’s Administration Puget Sound Healthcare System (VAPSHCS) and the other lab is located at the Health Sciences Building (HSB) of the University of Washington (UW). The HMALs provide an integrated and interdisciplinary environment for the study of human movement. We feature the research at the UW HMAL in this newsletter and will feature the research at the VA HMAL in our spring edition.

In 2009, researchers in the UW HMAL were awarded over $470,000 in funding for new...
projects. Among these grants, Valerie Kelly, PT, PhD, received a $50,000 award to upgrade the motion analysis camera system in the lab. Dr. Kelly’s grant was funded by the American Reinvestment and Recovery Act and was a supplemental award for her National Institute of Health (NIH) K-01 grant. The upgrade was necessary to enhance technological resources to assist with both clinical and research objectives. The HMAL facilities allow examination of movement. Researchers in the HMAL study biomechanical, neurological, and metabolic aspects of human movement.

The UW HMAL Core Research Areas include:

**Gait Mechanics**
The overall focus of this research area is to better understand biomechanical, neuromuscular, and metabolic aspects of walking in healthy individuals and individuals with musculoskeletal or neurologic pathology. These studies range from examination of walking in people with traumatic foot injuries, to examination of gait changes in people with Parkinson’s Disease.

**Grasping Mechanics**
Research in this area includes clinical biomechanics upper limb articulations including the shoulder and fingers. These studies investigate how people grasp objects and then the findings help researchers to develop mechanisms that might replace some functions of the human hand.

**Manual Wheelchair Mechanics**
This research examines the kinematics, kinetics, and spatiotemporal characteristics of upper limb movements in individuals with spinal cord injury who use manual wheelchairs.

**Musculoskeletal Biomechanics**
Research in this area works toward understanding the consequences of exercise and physical therapy interventions on joint stability.

Recent projects included the study of the effects of strength training for knee osteoarthritis and the effects of mobilization on joint movement.

**Posture and Stability**
Research in this area seeks to understand the use and integration of sensory information for postural control during sensory perturbations in children with cerebral palsy and other developmental disabilities.

The goal is to design appropriate physical therapy sensory-motor interventions and determine effectiveness for those interventions.

**Sensorimotor Training for Balance**
The goal of this research is to develop and test a novel sensorimotor intervention for adults and children with neurological disorders who demonstrate balance problems that impact daily function.

Efficient and automatic balance forms the basis for stability needed during many daily activities (e.g. attending and sitting in a classroom desk, navigating a complex environment, engaging in a team sport).

**Spasticity and Joint Stiffness**
Research in this area includes examining how ankle spasticity and joint stiffness can adversely impact the quality of life and gait in persons with stroke, cerebral palsy, equinovarus foot and other pathologies.

The HMAL has developed equipment and methods to mechanically quantify spasticity and joint stiffness in order to better understand the mechanisms, natural history and effectiveness of interventions for treating ankle spasticity and joint stiffness.

To learn more about the UW Human Motion Analysis Laboratory, please visit: [http://rehab.washington.edu/research/hmal/](http://rehab.washington.edu/research/hmal/)
The Department is pleased to announce that our Sports Medicine fellowship was recently accredited by the Accreditation Council for Graduate Medical Education (ACGME). There are currently only 10 PM&R accredited Sports Medicine fellowships in the country.

Applicants are interested in receiving training in accredited programs as it not only ensures that the training meets a certain standard but also allows the graduate to sit for the Certificate of Added Qualifications (CAQ) examination and thus become board-certified in Sports Medicine.

With this new ACGME accreditation, the Sports Medicine fellowship is even more competitive with approximately 40 applicants for one slot.

Directed by Mark Harrast, MD, Clinical Associate Professor of Rehabilitation Medicine, Orthopaedics and Sports Medicine, the fellowship provides a broad exposure to the clinical practice of sports medicine including, but not limited to: training in the care of athletes and active people of all ages; team physician training with sideline event coverage and training room experience at the high school and collegiate level; directing and organizing, as well as providing care at mass participation endurance events; and procedural training in musculoskeletal ultrasound, fluoroscopically-guided spinal injections, and electrodiagnostic evaluations.

Staying true to the spirit of UW PM&R, the new musculoskeletal ultrasound curriculum within the fellowship is a multidisciplinary endeavor with our Primary Care Sports Medicine and Rheumatology colleagues.

Dr. Leah Concannon is our current Sports Medicine fellow.

New ACGME Accredited Pediatric Rehabilitation Fellowship Opportunity

The Department is pleased to announce that we have a new Pediatric Rehabilitation fellowship at Seattle Children’s Hospital (SCH) that is accredited by the Accreditation Council for Graduate Medical Education (ACGME).

The fellowship is a 1 or 2 year fellowship depending upon the person’s previous level of training.

Specifically, if the candidate did a combined residency in both Pediatrics and Physical Medicine and Rehabilitation (PM&R) they will complete a one year fellowship.

If the candidate did their residency training in PM&R, they will complete a 2 year fellowship.

Directed by Dr. Susan Apkon, Associate Professor and Chief of Rehabilitation Medicine at SCH, the fellowship will provide trainees with both outpatient and inpatient experiences.

The fellow’s inpatient experience will include care of children and adolescents with disability due to cancer, brain injury, spinal cord injury and other medical conditions. The SCH inpatient rehabilitation unit is a 12 bed Commission on Accreditation of Rehabilitation Facilities (CARF) accredited unit.

The fellow’s outpatient experience will include care for patients with brain injuries, spinal cord injuries, neuromuscular diseases, cerebral palsy, spina bifida, limb differences, arthrogryposis, and sports injuries.

The first Pediatric Rehabilitation fellow will start August 2012.
Rehabilitation Psychology Division Awarded New Training Grant

The Psychology Division has been awarded a Health Resources and Services Administration (HRSA) Graduate Psychology Education (GPE) grant titled “Rehabilitation Psychology Internship for Underserved Patients” to fund additional training positions in their programs.

The purposes of the GPE grant are to: 1) increase the number of psychologists trained through our program in providing services to medically underserved populations in order to reduce disparities that currently exist for this population; and 2) foster an integrated approach to healthcare services in these underserved populations by having psychology trainees working essentially side by side with providers in a multidisciplinary setting.

The grant will fund one new intern and fellow. The grant will also add three new rotation sites: the Madison Clinic at HMC, which provides medical care and social services for persons living with HIV/AIDS; the Dental Education in Care of Persons with Disabilities Clinic at the UW School of Dentistry, which provides dental services to patients with developmental, physical, mental/and or emotional disabilities; and the Women’s and Children’s Clinic at HMC, whose mission is to serve patients from underserved and minority populations.

A related and anticipated benefit of this grant is that the Department will be able to provide education to and collaborate with a broader array of healthcare professionals including rehabilitation physicians, internal medicine specialists, pediatricians, dentists, nurses, dental hygienists, physical, occupational speech, and therapeutic recreation therapists, social workers, vocational rehabilitation counselors, and other allied healthcare professionals.

Dave Patterson, PhD, Professor, and Jeff Sherman, PhD, Clinical Associate Professor, are the Principle Investigators (PI’s) on the grant.

Acquired Brain Injury Fellowship Program Accepting Applications

The Department is currently accepting applications for a one-year clinical fellowship in acquired brain injury for the 2011-2012 academic year.

The program is in its second year of accepting applications.

Directed by Dr. Kathleen Bell, Professor and Project Director for the UW Traumatic Brain Injury Model System (UW TBIMS), the mission of the fellowship is to enhance community access to physiatrists with advanced training in the care of those with acquired brain injury, regionally and nationally, through education and mentorship.

The Fellow is part of an interdisciplinary team, providing state of the art care to persons with traumatic brain injury (TBI), stroke, and other brain disorders.

This clinical fellowship includes acute and community management of patients, with educational opportunities in neuroimaging, cognitive rehabilitation, spasticity management (including botulinum toxin, phenol, intrathecal baclofen), neuropharmacology, sports concussion, and polytrauma.

The Fellow works with neuroradiologists, neurosurgeons, neurologists, and neuropsychologists in addition to physiatrists in pursuit of these goals.

The Fellow also has the opportunity to participate in clinical research with a nationally renowned rehabilitation medicine team including physiatry, neuropsychology, clinical psychology, occupational and physical therapy, rehabilitation counseling, and statistics.

To learn more about our Fellowship Programs, please visit: [http://rehab.washington.edu/education/fellowship/](http://rehab.washington.edu/education/fellowship/)
**Welcome New Fellows**

**Kevin Alschuler**  
*Clinical Psychology Fellow*  
Dr. Alschuler earned his PhD in clinical psychology from Eastern Michigan Univ. His clinical interests include working with rehab populations, particularly chronic pain patients, to identify ways to engage in a meaningful lifestyle despite the presence of their medical condition.

**Bridget Klest**  
*Clinical Psychology Fellow*  
Dr. Klest earned her PhD in clinical psychology from the University of Oregon. Her clinical interests include Psychological Trauma, Anxiety, and Post Traumatic Stress Disorder (PTSD), and how these relate to physical health in vulnerable populations.

**Dori Rosenberg**  
*Post-Doctoral Fellow*  
Dr. Rosenberg earned her PhD in clinical psychology from the UCSD & San Diego State Joint Doctoral Program. Her research focuses on physical activity to promote healthy aging and prevention of secondary conditions for people with chronic illnesses and disabilities.

**Michael Burns**  
*Pre-Doctoral Fellow*  
Michael Burns is a current student in our PhD in Rehabilitation Science Program. His research focuses on helping people with aphasia (and other communication disorders) increase their access to health care services.

**PhD in Rehabilitation Science Program**

Please welcome the third cohort of PhD in Rehabilitation Science students.

**Division of Physical Therapy**

Please welcome the Doctorate of Physical Therapy class of 2012.
Welcome New Classes continued from page 5.

Division of Occupational Therapy

Please welcome the Master of Occupational Therapy class of 2012.


Division of Prosthetics & Orthotics (P&O)

Please welcome the Prosthetic and Orthotics class of 2012.

Left to right: Steve Blas, Chatelaine Fortenberry, Megan Logan, Emily Vickers, Sarah Bui, Jed Newhardt, Frances Berg, Jennifer Wollbach

CONTINUING EDUCATION OPPORTUNITIES:

UW Medicine
UW SCHOOL
OF MEDICINE

The 28th Annual
Review Course in
Physical Medicine
& Rehabilitation

March 27—April 2, 2011
Hotel Deca Seattle
4507 Brooklyn Ave NE
Seattle, WA 98105

For brochure downloads and more information as it becomes available, visit: http://uwcme.org

The 26th Annual
Justus F. Lehmann
Symposium

Aging Issues in Rehabilitation

With Keynote Speaker:
Walter Frontera, MD, PhD
May 20, 2011

Center for Urban Horticulture
Registration begins March 2011. Please check our website for updates: http://rehab.washington.edu/education

To learn more about our education & training programs, please visit: http://rehab.washington.edu/education/
Dr. Patterson Publishes Book

David Patterson, PhD, Professor, recently published the book, *Clinical Hypnosis for Pain Control*. Dr. Patterson’s book is published through the American Psychological Association (APA) and is a compelling argument for the use of hypnotic analgesia as a viable alternative to psychomarmacological interventions for controlling acute, chronic and perioperative pain, as well as pain from non-surgical procedures.

Dr. Bell Elected Secretary of AAPM&R

Kathleen Bell, MD, Professor, was recently elected as secretary of the Board of Governors for the American Academy of Physical Medicine & Rehabilitation (AAPM&R). The AAPM&R is the premier medical society for the specialty of PM&R and exclusively serves the needs of practicing PM&R physicians. The mission of the AAPM&R is to serve its member physicians by advancing the specialty of PM&R, promoting excellence in psychiatric practice, and advocating on public policy issues related to persons with disabling conditions.

Dr. Kaufman Appointed to AMA-YPS & NASS Committee

Dr. Marla Kaufman, MD, Clinical Assistant Professor, was recently appointed as the AAPM&R Delegate to the American Medical Association’s Young Physician Section (AMA-YPs). The AMA-YPs focuses on the concerns of those physicians under 40 years of age or within the first 8 years of practice. Dr. Kaufman was also appointed to the membership committee for the North American Spine Society (NASS), a non-profit medical society focused on improving spine medicine through advocacy, research and education.

Dr. Herring Changing the Culture Regarding Concussion

Earlier this fall, Stanley Herring, MD, Professor and Co-Director of the UW Medicine Seattle Sports Concussion Program, testified before lawmakers regarding the dangers of concussions on young athletes. Dr. Herring and other physicians and specialists warned that student athletes risk permanent brain damage if schools do not protect them from the effects of concussions. Dr. Herring’s testimony comes in response to the 2009 Zackery Lystedt Law which requires youth athletes to be removed from play after a potential head injury or concussion. Healthcare providers must then clear students to return to sport activities.

For more on the Zackery Lystedt Law, and the UW Concussion and Brain Injury Rehabilitation Programs please read a recent in-depth feature in UW Medicine Magazine.
Welcome New Faculty

Alfred Gellhorn, MD, joins the faculty as a Clinical Assistant Professor. His expertise is in musculoskeletal and spine rehabilitation with a special interest in ultrasonography. Dr. Gellhorn completed his Musculoskeletal/Spine fellowship at Premier Orthopaedics & Sports Medicine in Philadelphia and his residency training in PM&R here at the UW.

You may welcome Dr. Gellhorn at: gellhorn@uw.edu

Chet Moritz, PhD, joins the Division of Physical Therapy (PT) as an Assistant Professor. Dr. Moritz’s expertise is in brain-computer interfaces and neurotechnology, and exercise physiology. His research interests include developing treatments for paralysis using brain-computer interfaces and neurotechnology.

Dr. Moritz earned his PhD in Integrative Biology at UC Berkley, and completed his postdoctoral training at University of CO, Boulder, and the UW.

You may welcome Dr. Moritz at: ctmoritz@uw.edu

Lauren Schwartz, PhD, joins the faculty as a Clinical Assistant Professor. Dr. Schwartz’s expertise is in pain management, coping with disability and medical issues, and the impact of disability on couples/families.

Dr. Schwartz earned her PhD from the Univ. of California, San Diego/San Diego State Joint Doctoral Program. She completed both her predoctoral internship in clinical psychology and her postdoctoral fellowship in rehabilitation psychology at the UW.

You may welcome Dr. Schwartz at: lschwartz@uw.edu

Happy Holidays!

from your friends at
UW Rehabilitation Medicine