Greetings UW Rehabilitation Medicine friends and colleagues,

I am pleased to announce that the Department ranks number 1 in National Institutes of Health funding for Physical Medicine. This ranking is a direct result of the innovative and cutting-edge research conducted by our faculty here at the University of Washington.

George Kraft, MD, is one such faculty member whose research awards have kept us a leading recipient of NIH funding over his 40 years on faculty. As of January 1, 2012, Dr. Kraft has stepped down from his clinical duties to focus on Multiple Sclerosis research. He is sorely missed in his roles as clinician and teacher. He has been the Director of the UW MS Center since 1982 and has taught multiple sclerosis and electrodiagnosis to literally hundreds of residents and fellows. In honor of Dr. Kraft’s career milestone, we are pleased to bring you a more in-depth write-up on his extraordinary career.

As we look to the future of MS care at the UW, we are pleased that the new UW Medicine MS Center at Northwest Hospital will be opening in July 2012. We look forward to bringing you updates on the grand opening of the new MS Center on our website and in future editions of our newsletter.

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

Peter Esselman, MD, MPT
Professor and Chairman

GEORGE KRAFT, MD, MS—MORE THAN 40 YEARS OF SERVICE AT UWMC

After more than 40 years of clinical service, 30 of which were as Director of the University of Washington Multiple Sclerosis Center, George Kraft, MD, MS, professor emeritus, has stepped down from patient care to focus on his passion: Multiple Sclerosis Research. Dr. Kraft has a long history of MS clinical care, research and

Dr. Kraft continued on page 2
teaching at the UW since joining the faculty in 1969. In 1977, he helped organize the UW Medicine Multiple Sclerosis Center, one of the first comprehensive MS Centers in the nation. He later assumed the directorship in 1982. Under Dr. Kraft’s strong leadership, the Center has earned a reputation as a leading MS Center, paving the way toward understanding the disease and devising new methods to help people continue to function despite the many challenges of MS.

As a clinician, Dr. Kraft has been a long-time champion of rehabilitation to improve function in persons with MS, most notably at a time when rehabilitation was essentially ignored. Even with the development of disease-modifying drugs, rehabilitative strategies are still the only way to improve function.

Over the years, Dr. Kraft’s research has focused on a number of areas including: rehabilitative techniques to improve function in persons with MS, MS and exercise, stem cell transplant treatment, and understanding the effects that MS has on individuals over time. Perhaps his greatest discovery is that fatigue is not only a symptom of MS, but it is the most common symptom. Today, it presents in approximately 85% of MS patients. Prior to Dr. Kraft’s publication of this in 1984, fatigue was not even mentioned as a symptom in the literature. Dr. Kraft still continues to research this topic, including new and better ways to measure it.

Since 1998, Dr. Kraft has been the Principal Investigator (PI) on the only federally funded MS Research Center, the Multiple Sclerosis Rehabilitation and Research Training Center (MSRRTC). Numerous research papers dealing with the management of depression, function, pain, and disease course in people with MS have come from the MSRRTC over the past 13 years.

A gifted educator, Dr. Kraft has played an invaluable role in our clinical education and training program, having taught hundreds of PM&R residents MS and electrodiagnostic medicine over the years. He also established the first MS Clinical Fellowship in the country, which to this day, stands as a model around which other MS Clinical Fellowships have been patterned.

Some of Dr. Kraft’s innumerable career honors include the 2011 National MS Society Volunteer Lifetime Achievement Award, the Alvord Professorship of Multiple Sclerosis Research, the Distinguished Clinician Award from the American Academy of PM&R, and the Distinguished Academician Award from the Association of Academic Physiatrists.

In short, Dr. Kraft is a true pioneer who has made major contributions to the advancement of MS treatment. He has undoubtedly improved the quality of life for countless patients living with MS, helping them to live their lives as independently as possible, and will continue to do so with his research. As we look to the future of clinical MS care at the UW, we are assured that Dr. Kraft’s strong clinical and administrative leadership has set a solid foundation for continued success at our new UW Medicine MS Center opening at Northwest Hospital and Medical Center in July 2012.
Fellowships are an important component of the Department of Rehabilitation Medicine’s mission. They provide a community of interest and activities where fellows can learn from practical experience provided by skilled clinicians and researchers. Unfortunately, there are shortages of rehabilitation professionals in all major disciplines, and an even more acute shortage of doctoral level rehabilitation educators and researchers. These fellowships provide the department continuity by training the next generation of rehabilitation specialists.

Currently, the department supports over 20 post-graduate fellows from a variety of rehabilitation disciplines including physicians, psychologists, occupational and physical therapists, and speech-language pathologists. Some of the fellowships focus on clinical care, including advanced training in Spinal Cord Injury, Acquired Brain Injury, Multiple Sclerosis, Musculoskeletal and Sports Medicine, Neurologic Physical Therapy, and Clinical Psychology. And starting this summer, two fellows will begin our new ACGME accredited Pediatric Rehabilitation Medicine Fellowship.

Other fellowships focus on research, either on specific research grants or on training grants. The Department of Rehabilitation Medicine has two major research training grants. Together, these grants support 7 fellowship positions, both at the pre- and post-doctoral levels. The first research training grant is called “Research Training in Medical Rehabilitation” and has been funded for over 20 years by the National Institutes of Health (NIH): National Center of Medical Rehabilitation Research. Kathryn Yorkston, Ph.D., professor, is the current Project Director. Initiated in 2008, our other research training grant is called Advanced Rehabilitation Research Training (UW-ARRT) and receives its funding from the National Institute of Disability and Rehabilitation Research (NIDRR). Deborah Kartin, PhD, professor, directs the UW-ARRT.

The goals of these two research training grants are to increase the number of effective and successful rehabilitation researchers. Our fellows not only understand their own field and area, but also have a working knowledge of other related Rehabilitation Science fields and have experience interacting with experts who are knowledgeable in these other areas.

Looking back over the past 10 years alone, the accomplishments of all of our research grant trainees are truly impressive. They have published over 120 articles in peer-reviewed journals. Our pre-doctoral fellows have been awarded NIH grants to fund their dissertation research. After successfully completing their doctoral degrees, some have accepted post-doctoral positions at other research-focused universities and others now have faculty appointments where they both teach and do research. Our post-doctoral fellows have gone on to faculty positions at the University of Washington and other research universities. Others are now Directors of Research at major Rehabilitation Institutes. Many have successfully obtained independent grant funding to support their early career research. Ten members of our current faculty received fellowships through our research training grants.

In short, our clinical and research training programs have made a mark and now provide the field of Rehabilitation Medicine with a group of successful clinician, teachers, and researchers. Fellows trained at the University of Washington will lead and influence the future of the field of Rehabilitation Medicine.

To learn more about our fellowship programs, please visit the education section of our website:

http://rehab.washington.edu/
Dr. Brian Krabak: US Olympic Marathon Trials, Ultra Marathon Medicine

Dr. Brian Krabak, clinical associate professor, provided medical coverage at the U.S. Olympic Men’s and Women’s Marathon Trials in Houston, TX on January 14th. Six men and women who will represent Team USA in London earned their spots on the marathon team.

In conjunction with the Olympic trials, Dr. Krabak gave a lecture at the Houston Marathon Medical Conference hosted by the Houston Marathon and the American Road Race Medical Society. He spoke on Ultramarathon Medicine: “Medical Challenges & Observations.”

Endurance athletes, especially ultramarathon runners (athletes who compete in any race longer than the traditional marathon length of 26.2 miles), are of particular interest to Dr. Krabak. Despite the increase in participation of ultra-marathon races over the past few decades, there is very little research regarding injuries to the multi-day ultra-marathon runner. Dr. Krabak and colleagues recently published the first-ever prospective, descriptive study of injury and illness rates in runners competing in seven-day, 250-kilometer, off-road, ultramarathon races:


Drs. Powell and Jirikowic Attend First Annual Occupational Therapy Science Summit in St. Louis

The First Annual Occupational Therapy Science Summit meeting was held March 11-13 at Washington University in St. Louis to promote collaborations for funded research in occupational therapy and to mentor emerging researchers. The UW Division of Occupational Therapy was well represented among the 52 senior occupational therapy (OT) researchers who participated in this interactive forum.

Janet Powell, PhD, OTR/L, Associate Professor and Division Head, presented her ongoing NIDRR-funded (National Institute on Disability and Rehabilitation Research) randomized controlled trial on a telephone-based, problem solving intervention for caregivers of persons with traumatic brain injury to the Neurorehabilitation and Neuroscience work group. Tracy Jirikowic, PhD, OTR/L, Assistant Professor, presented her research program in fetal alcohol spectrum disorder to the Pediatrics work group.

In addition, Cecille Corsilles-Sy and Jennifer Nash, occupational therapists in the UW PhD in Rehabilitation Science program, and Diane Rios, UW post-doctoral fellow, presented their research at a poster session for emerging scientists which included mentoring opportunities for the presenters from the senior scientists in attendance.

Drs. Powell and Jirikowic appreciated the opportunity to dialogue with other OT researchers and national leaders about strategies for strengthening the scientific knowledge base for OT practice. They, along with the other OT Division research faculty, are looking forward to continued involvement in these collaborative efforts.
MOT Students Participate in OT Global Day of Service

On February 25th, our Master of Occupational Therapy (MOT) students joined over 2,500 occupational therapy students and practitioners around the world to provide service to their communities as part of the inaugural Occupational Therapy Global Day of Service (OTGDS). The OTGDS initiative aims to communicate the value of the occupational therapy profession through an organized international effort of community service.

The UW students volunteered at the Hearthstone Retirement Living Community and the Little Bit Therapeutic Riding Center. At the Hearthstone Retirement Living Community, six MOT students led interactive activities with residents on the memory care and assisted living floors. The students facilitated two group activities: a Jenga™ tower building activity and a balloon piloting activity (residents were given a small paper cup, 3 balloons and tape to construct “hot air balloons” and make them fly). The students used these activities to engage the older adults in meaningful social interaction through team work, problem solving, and movement.

“Working with the older adult population outside of the classroom helped me to appreciate our role as OTs across the lifespan,” said second year MOT student, Jeanette Wu.

An additional group of eight MOT students volunteered at the Little Bit Therapeutic Riding Center, an organization that provides equine-assisted activities and therapies to children and adults with disabilities. They helped staff prepare for their annual Riders Showcase, a community event held to raise awareness of adaptive horse riding therapy, as well as a future fundraising auction.

In addition to the local benefit, the students’ service hours counted toward a donation to UNICEF from Slack Inc, one of the sponsors of the OTGDS. These successful volunteer activities allowed the students to practice the skills they are learning in the UW MOT program and give back to the community while promoting the OT profession.

“I signed up to volunteer because I think it’s important for us to contribute outside of our profession while also representing it. I enjoyed my experience and I would recommend it to all students,” said Wu.

2012-2013 Chief Residents Elected

Congratulations to Matthew Grieson, MD, and Elena Katz, MD for being elected by their co-residents as the 2012-2013 Chief Residents.

The entire residency program extends a special thanks to current Chiefs Residents, Molly Fuentes, MD, and Brian Brendel, MD, for a terrific year of leadership.
Joseph Czerniecki, M.D., Professor and Associate Director of the Seattle-based VA Research Center of Excellence in Limb Loss Prevention and Prosthetic Engineering, is the recent recipient of the Veterans Administration’s (VA) 2011 Paul B. Magnuson Award for Outstanding Achievement in Rehabilitation Research and Development (RR&D). The award is presented annually to a VA RR&D investigator who exemplifies the entrepreneurship, humanitarianism, and dedication to veterans displayed by Dr. Magnuson during his career. It is the highest honor for VA rehabilitation investigators. With this award, Dr. Czerniecki received an additional $50,000 per year for 3 years to support his research program. In light of this prestigious award, Dr. Czerniecki was kind enough to answer a few questions about his career and long history of research related to amputations and prosthetics.

Q: When and how did you become interested in amputee and prosthetics research?
A: I attribute it to a combination of celestial alignment and my interest in biomechanics. At the time I was completing my residency training at the UW, a local Orthopedic Surgeon, Dr. Ernest Burgess was just finishing the development of a new class of prosthetic foot (The Seattle Foot) that promised to significantly enhance the function of amputees. Before its completion, biomechanical analysis was needed to evaluate its efficacy, which meshed very well with my scientific and clinical interests. Funding became available for me to undertake a research fellowship to perform the necessary biomechanical studies, and so my research career was launched.

Q: How has your research evolved over the years?
A: As I mentioned, my research career started with biomechanical analysis of prosthetic components, particularly the scientific study of how amputees adapt their gait characteristics to successfully walk and run in the absence of sensory/motor function in the amputated extremity. These analyses also quantified the effect of various prosthetic components on the efficiency of amputee mobility. Although I continue to collaborate with my engineering colleagues at our VA Research Center in areas related to the development of novel prosthetic components, my research has evolved into areas that have a greater clinical emphasis. As seen in the last decade, advances in prosthetic components have played a major role in the huge functional gains amputees have experienced, such as climbing Mt Everest, or participating in the Iron Man triathlons. However, the majority of amputees continue to struggle with much more rudimentary tasks included in their activities of daily living. Here the human side of the equation and the surgical/rehabilitation therapeutic interventions may play a greater role in the recovery of function.

Q: Can you briefly explain the focus of your most current research?
A: My most current research involves enhancing our understanding of patient factors that contribute to functional outcome. In particular, we are working on developing a predictive tool that will allow us to predict amputee mobility at 12 months based upon specific peri-operative factors. The clinical goal is to be able to better inform patients and surgeons about a given individual’s mobility outcome at each major lower extremity amputation level, as the surgical decision is being made.

Q: What do you find most rewarding about your work?
A: First of all, amputees are a very gratifying patient population to work with as their care results in not only a relatively rapid recovery of function, but a substantial recovery of function. Also, the complexity of their underlying co-morbid medical/surgical conditions and their effect on function provides a clinical challenge, while the prosthetic device with its human interface and foundation in mechanical principles provides an intellectual challenge. Secondly, it is incredibly satisfying to work with young investigators such as David Morgenthaler, MD, who bring intellectual curiosity to their work. Asking the question “why?” goes so much beyond the simplicity of wanting to know what to do. Finally, and most importantly, the VA Research Center is fortunate to have not only bright, but collaborative and collegial investigators. In particular I would like to acknowledge my current investigator group Aaron Turner, PhD, Rhonda Williams, PhD, and Dan Norvell PhD. They are humblingly (that is a new word) intelligent, and wonderful individuals.

Q: Finally, what are some of your interests outside of medicine?
A: Outside of medicine my primary interests are to stave off the inevitable challenges of old age. I like to ride my road bike, and mountain bike, as well as hike in the summer. In the winter I snowboard as often as I can, and if not doing that, you will see me at the IMA playing squash or perhaps engaging in the monotony of riding a stationary bike.
**Faculty News, Awards & Honors:**

**Dr. Dave Patterson’s SnowWorld Featured on NPR’s All Things Considered**

In a February 12 segment on NPR’s All Things Considered, a burned soldier describes how the innovative virtual reality therapy program SnowWorld dramatically reduced the pain of his physical therapy procedures. SnowWorld was developed by Dr. Dave Patterson, professor, and colleague Hunter Hoffman, PhD. "It takes a certain amount of attention to process pain," Patterson says. "If you are able to put that attention elsewhere, there is less attention to process pain, and consequently, people will feel less pain." SnowWorld provides that distraction. Listen to the story: [http://www.npr.org/2012/02/12/146775049/virtual-penguins-a-prescription-for-pain](http://www.npr.org/2012/02/12/146775049/virtual-penguins-a-prescription-for-pain)

**Dr. Janet Powell Selected for AOTA Roster of Fellows**

Dr. Janet Powell, associate professor and division head of the Masters of Occupational Therapy Program, has been selected for the Roster of Fellows of the American Occupational Therapy Association (AOTA). The Roster of Fellows recognizes members of the AOTA who, with their knowledge and expertise, have made significant contributions to the continuing education and professional development of members of the Association. Dr. Powell was chosen for her excellence in research, education, and practice. Dr. Powell will be presented the award at the AOTA conference in Indianapolis in April.

**Dr. Ivan Molton Receives Switzer Merit Fellowship**

Dr. Ivan Molton, assistant professor, is the recent recipient of a Switzer Merit fellowship. The fellowship is named for the late Mary E. Switzer who was a public administrator and social reformer who most notably shaped the 1954 Vocational Rehabilitation Act. The Switzer Fellowship provides individual researchers the opportunity to develop new ideas and gain research experience. Dr. Molton is working for one year on an independent research project related to aging and disability. The fellowship award is administered by the US Department of Education, Office of Special Education and Rehabilitative Services.

**Dr. Stanley Herring Presents “Concussion in Sports” for KCTS9’s “Science Café”**

In March, Dr. Stanley Herring, clinical professor and co-medical director of the Seattle Sports Concussion program, presented “Concussion in Sports” for KCTS9’s “Science Café” series. In the 30 minute program, Dr. Herring explores the causes, symptoms, effects, and recovery from this common sports injury. “Science Café” is a monthly educational event that brings scientists face-to-face with members of the Greater Seattle Community. You may watch Dr. Herring’s presentation in its entirety on the KCTS9 website: [http://kcts9.org/education/science-cafe/sports-concussions](http://kcts9.org/education/science-cafe/sports-concussions)

**The Department of Rehabilitation Medicine Ranks No. 1 in NIH Funding**

The University of Washington Department of Rehabilitation Medicine received over $2.6 million in research funding from the National Institutes of Health (NIH) in 2011, making it the top-ranked Physical Medicine department in NIH funding in the country. Such a ranking reflects the innovative and cutting edge research being conducted by our faculty. [Blue Ridge Institute for Medical Research](http://www.bluebridges.com) compiled the rank list.

Learn more about our research: [http://rehab.washington.edu/research/](http://rehab.washington.edu/research/)
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rehab@uw.edu

For those of you interested in seeing past issues of our newsletters:

**VISIT US ON THE WEB!**

HTTP://REHAB.WASHINGTON.EDU

UW Department of Rehabilitation Medicine banner image by: Janet Schukar

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**UW REHAB MEDICINE TEAM PROVIDES MEDICAL COVERAGE AT NCAA DIV. I MENS SWIMMING & DIVING CHAMPIONSHIP**

Dr. Brian Krabak, MD, MBA, clinical associate professor, was Medical Director for the 2012 NCAA Division I Men's Swimming and Diving Championship held in Federal Way, WA March 22-24, 2012. Leah Concannon, MD, clinical assistant professor, Chris Standaert, MD, clinical associate professor, and Dan Colombo, MD, sports medicine fellow, provided medical coverage as well.

Also representing the Department were several PM&R residents:
- Mamie Air, MD
- Kyle Comrie, MD
- Jake Carlson, MD
- Matthew Grierson, MD
- Andrew Hsu, MD
- Margaret Jones, MD
- Mindy Loveless, MD
- Levi Miller, DO
- Alison Putnam, DO
- Scott Simpson, MD

Dr. Krabak and his team were busy evaluating and managing various injuries ranging from respiratory to acute trauma from diving to overuse injuries from swimming. Collegiate athletes from all over the nation came to compete in the event.

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**UPCOMING EVENT: JUSTUS F. LEHMANN DAY SYMPOSIUM**

The 27th annual JFL Symposium focuses on "New Technologies in Rehabilitation." We are fortunate to have an outstanding group of speakers who will share their work and knowledge on a number of topics in the area, including: the future of technology in rehabilitation, technological advances in spinal cord injury, neural technology, prosthetic engineering, augmented reality technology, and mobile technologies.

This year’s keynote speaker, Michael L. Boninger, M.D., professor and chair of the PM&R Department at the University of Pittsburgh, is a leading expert in the areas of SCI and assistive technology. Dr. Boninger has authored over 20 book chapters and published more than 174 papers on the topics. He also holds 5 U.S. patents.

Lehmann Day will take place on **May 18, 2012** from 7:30AM – 4:00PM at the Center for Urban Horticulture. You may view the complete schedule on our website: [http://rehab.washington.edu/education/conteduc.asp](http://rehab.washington.edu/education/conteduc.asp)