Greetings UW Rehabilitation Medicine friends and colleagues,

Our latest round of grant awards, totaling an astounding $9.9 million in funding, illustrate the variety of groundbreaking research being conducted in our department.

Our department is involved in national and international scholarship demonstrating our commitment to advance the field of rehabilitation beyond our local community. I’m proud to highlight some of those recent activities in this issue. Drs. Kathy Bell and Barry Goldstein were recently elected to major leadership positions in national organizations (page 7). Last fall, Drs. Marcia Ciol and Jeanne Hoffman traveled to the University of Sao Paolo in Brazil for both educational outreach and research purposes (page 4). And in June 2013, the department, along with the Center for Technology and Disability Studies, will host the international symposium, “Disability, Technology and Rehabilitation in Low and Middle Income Countries” (page 5).

I am pleased to announce that registration for our 30th Annual PM&R Board Review Course is now open. A special thanks goes to course chairs Drs. Jennifer Zumsteg and Karen Barr for organizing such a valuable continuing medical education event.

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

Spotlight: New Grant Awards

Research is a major focus in the department. From our federally funded model systems of care, to our research centers to our innovative and cutting edge research studies, we cover a variety of rehabilitation conditions, diseases, and treatments. Our latest grant awards, totaling over $9.9 million, illustrates this point with funding for research in the following areas: multiple sclerosis, aphasia, traumatic brain injury, disability-related pain, intense focused ultrasound and neuroprosthetics. Also included are grants for a new fellowship on outcomes measurement and the development of a continuing education course for the American Academy of Orthotics and Prosthetics.

Spotlight continued on page 2
Spotlight: New Grant Awards cont’d from page 1

PI: Dagmar Amtmann, Ph.D.
- New ways to measure sleep of individuals living with MS (1/1-12/13/13, $40,000)
  This study will examine novel, less expensive and less invasive ways to measure sleep in individuals living with multiple sclerosis in their natural sleeping environment.
- Advanced Training on Outcomes in Rehabilitation Research (10/1/12-9/30/17, $747,552)
  You may read more about this new post-doctoral fellowship opportunity on page 4.

PI: Brian Hafner, Ph.D.
- AAOP Professional Continuing Education Course Development: The Effect of Ankle Foot Orthoses on Balance (7/2/12-12/31/12, $21,995)
  The American Academy of Orthotics and Prosthetics is convening a State-of-the-Science Conference. Dr. Hafner is designing and developing a professional continuing education course based on the effect ankle foot orthoses have on balance.

PI: Carolyn Baylor, Ph.D.
- Validating the Communicative Participation Item Bank (CPIB) for the Aphasia Population (12/1/12-11/30/14, $75,000)
  The purpose of this project is to validate the CPIB for use with people who have aphasia, and to examine more closely the life participation restrictions associated with aphasia. This instrument has been validated for several populations with speech and voice disorders, but has not been validated for people with aphasia.

PI: Kathy Bell, M.D.
- Amitriptyline to Prevent Headache after Traumatic Brain Injury (10/1/12-9/30/15, $597,457)
  This study aims to determine if early treatment with amitriptyline will decrease the frequency and severity of headaches after mild TBI. Amitriptyline is an antidepressant that is commonly available and inexpensive.
- UW Traumatic Brain Injury Model System (UWTBIMS) (10/1/12-9/30/17, $2,205,001)
  This is NIDDR’s 4th 5-year competitive renewal of the UWTBIMS. Learn more at tbi.washington.edu

PI: Jeanne Hoffman, Ph.D.
- Telephone-Delivered Cognitive Behavioral Therapy for Chronic Pain following Traumatic Brain Injury (9/30/12-9/29/16, $3,085,185)
  This Department of Defense funded study plans to compare two different behavioral treatments for pain in Veterans with a history of TBI. Both treatments involve “self-management” approaches to pain, i.e. educating the Veteran about pain, discussing the impact of pain and different ways to manage it in hopes of decreasing pain and its impact on life.

PI: Mark Jensen, Ph.D.
- Psychological Treatment of Disability-Related Pain: Efficacy and Mechanisms (7/20/12-5/31/17, $2,802,426)
  The long-term objectives of this research program are to develop and test innovative treatments for disability-related pain and increase our understanding of the mechanisms of the effects of these treatments in order to (1) maximize the effectiveness of psychological pain treatments and (2) better match individual patients to specific treatments.

PI: Jared Olson, M.D.
- Premotor and motor cortical signals and interactions during human movement (8/1/12-7/31/15, $340,667)
  The goal of this study is to create a clinical neuroprosthesis using input signals from multiple regions of the cerebral cortex. The specific objective of this proposal is to characterize interactions among motor areas of the cortex during movement. Funding is provided by the Rehabilitation Medicine Scientist Training Program (RMSTP).
Drs. Hoffman and Ciol in Brazil

Earlier this fall, Dr. Jeanne Hoffman, associate professor, and Dr. Marcia Ciol, research associate professor, traveled to the University of São Paulo School of Nursing (USPSON), Ribeirão Preto campus in Brazil as visiting lecturers and ambassadors of the department.

Educational Outreach
During their time in Brazil, Drs. Hoffman and Ciol each gave 3 talks to USPSON faculty, undergraduate, and graduate students. Topics included: writing a paper in English to publish in international journals; choosing the right psychosocial measure; methodological issues; and study design.

Drs. Ciol and Hoffman also provided feedback to graduate students who presented their research using power point presentations in English (as opposed to their native Portuguese).

“I think the students were very nervous to present to these two people from the United States and of course, it’s anxiety provoking enough to present at all as a student, much less add someone who only speaks English,” says Dr. Hoffman. “I was impressed by their openness and ability to let go of their discomfort when they worked to communicate in English.”

Research Collaboration
Although this was Dr. Hoffman’s first trip to Brazil, Dr. Ciol’s initial USPSON connection began in 2001 when she worked on a project with Dr. Rosana Dantas while Dr. Dantas was a visiting professor at the UW School of Nursing.

As a result of this collaboration, Dr. Ciol has since traveled to the USPSON Ribeirão Preto campus a total of 5 times to either teach a course or work on various research projects. The courses focus on study design and basic principles of statistics when planning a study. The main topics of the projects include translational and cultural adaptation to Brazilian Portuguese quality of life instruments, and the study of quality of life issues in persons with burn injury and with cardiac disease. More recently, Dr. Ciol’s collaborators have begun clinical trials with a focus on educational interventions aiming to increase the adherence to treatment in patients who need oral anticoagulant drugs.

To date, Dr. Ciol’s collaborations with Dr. Dantas and other USPSON faculty have resulted in 8 published papers, 2 papers in press, 1 book chapter and 2 submitted manuscripts awaiting review.

Dr. Ciol finds international research collaboration important on both personal and professional levels. “As a Brazilian who decided to stay in Seattle to form a family, collaborating with a University in Brazil is my way to give a little of my expertise back to my native country, since biostatisticians are still in high demand in Brazil,” says Dr. Ciol. “Professionally, the research questions might be similar, but the challenges of carrying out the studies can be quite different. Having to deal with differences in culture, education, and socioeconomic status of the populations, for example, forces one to be more open-minded and to think outside of the box.”

Rehabilitation Medicine in Brazil
Drs. Hoffman and Ciol were also fortunate to tour the rehabilitation center on the Ribeirão Preto campus, giving them an eye opening look at rehabilitation medicine in a developing country. The rehabilitation center in São Paulo has only outpatient rehab where they see about 500 patients a day. They have one physiatrist and 4 residents total. They offer physical therapy, occupational therapy, speech therapy, and psychology, but no recreational therapy. OT handles all assistive technology, but very little is available to patients outside of the hospital.

Most medical equipment, such as wheelchairs and electric beds, are imported, making it expensive and not easy to find. For patients in outlying areas, those with medical appointments take a bus to the hospital where they must spend the entire day, even if they only have a one-hour appointment.

Overall Impressions
Both Drs. Hoffman and Ciol found the entire experience personally and professionally rewarding and hope to return for educational and research purposes.

“Brazil is especially interesting in that it is a developing country that has made great strides in medical care and in research more broadly,” states Dr. Hoffman. “They can certainly learn from us, but we can also learn from them!”
International Symposium on Disability, Technology and Rehabilitation in Low and Middle Income Countries 2013

Nearly 1 billion of the world’s population (15%) have a disability. It is estimated that 80% of those individuals reside in low and middle income countries. Rehabilitation medicine, therapy, and assistive technologies are unavailable and unaffordable to the vast majority of this population. Although there is no global data on the unmet need for rehabilitation, national level data in low-middle income countries shows large gaps between rehabilitation services needed and services received. For example, in a study across four Southern African countries, between 26-55% of individuals received the medical rehabilitation they needed and 17-37% received the assistive devices they needed.

The Department of Rehabilitation Medicine and the Center for Technology and Disability Studies at the University of Washington, with support from other collaborators, will host the symposium, Disability, Technology and Rehabilitation in Low and Middle Income Countries, June 27, 28 2013 at the University of Washington in Seattle.

This international symposium aims to bring together the community of researchers, practitioners and other stakeholders who focus on improving and increasing access to technology and rehabilitation products and services to ensure full inclusion and participation for people with disabilities in the developing world.

The symposium will cover high priority topics in the field of disabilities and development including:

- Assistive technology and accessible information and communication technology
- Service delivery models
- Human resource development
- Policy, regulatory and funding mechanisms for supporting provision of technology and rehabilitation services
- Research and evidence-based practice

For more information, please visit: idtr.uwctds.washington.edu/workshops/2013, or contact the symposium organizers: Becky Matter (bmatter@uw.edu) or Mark Harniss (mharniss@uw.edu).

New Post-Doctoral Fellowship Opportunity: Advanced Training on Outcomes in Rehabilitation Research

The Department now offers an Advanced Training on Outcomes in Rehabilitation Research (UW-ATORR) post-doctoral fellowship. Our inaugural two fellows have been recruited; the next two positions will be available in the fall of 2014.

The overall goal of the UW-ATORR fellowship is to increase capacity for high quality outcomes in rehabilitation through training, mentoring, and structured research opportunities. Training focuses on the development and application of health outcome science. The program provides a unique opportunity for rehabilitation researchers to acquire and apply modern psychometric techniques and for researchers trained in modern psychometric theory to develop expertise in applications in disability and rehabilitation medicine research. Researchers with training in both rehabilitation and outcomes measurement are best positioned to develop, test, and evaluate psychometrically sound and clinically meaningful outcomes, translate research into practice, identify gaps in evidence that most effect people with disabilities, examine the prognostic information available to patients and providers, and examine behaviors, lifestyles, and choices within people’s control that may effect their health outcomes.

Dr. Dagmar Amtmann, research associate professor, is the fellowship director. Trainees also have the opportunity to work with a number of mentors at the UW, both in Rehabilitation and/or in related fields (e.g. radiology, health services, nursing).

The UW-ATORR Fellowship is funded by the Department of Education National Institute on Disability and Rehabilitation Research (NIDRR).

To learn more, please visit: rehab.washington.edu/education/
MOT Students Hold Clothing Drive in Honor of OT Global Day of Service

The Master of Occupational Therapy (MOT) students held a men’s clothing drive throughout the month of October to assist male patients at the Mental Health Units of Harborview Medical Center (HMC). The event was organized in honor of the Occupational Therapy Global Day of Service (OTGDS) on October 27.

In total, the MOT’s delivered an impressive 200 pounds of clothing to HMC, all donated by faculty, staff and students in the department.

Upon admission to the units, some patients often lack clothing choices to make them comfortable during their stay. Others do not have adequate clothing to face the elements at time of discharge.

The MOT’s chose to collect men’s clothing specifically since the units have higher admission rates for males. Additionally, the majority of staff are women and they regularly donate their used clothing, resulting in a surplus of women’s clothing much of the year.

“As a group, I feel that we definitely enjoyed this as a project. It was a great way for the entire OT department and other rehab disciplines to get involved equitably in a busy quarter,” says Valerie Tung, second year MOT student and one of the clothing drive organizers. “Hopefully this will be a project that will be continued by future classes.”

The OTGDS initiative aims to communicate the value of the occupational therapy profession through an organized international effort of community service.

The clothing drive allowed the MOT students a way to give back to the community while promoting the OT profession. It was also an excellent complement to the MOT second year curriculum unit on mental health. 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.

2012 Wilbert E. Fordyce Lecture a Success

Approximately 60 people attended the annual Wilbert E. Fordyce lecture held last October. The Department was honored to have Dr. Fordyce’s widow, Eleanor, in the audience. Special guest lecturer, Dr. Judith A. Turner, professor, Department of Psychiatry and Behavioral Sciences, presented “Cognitive-Behavioral Treatments for Chronic Pain: Innovations and Future Directions.” The entire event was very well received by those who attended.

"Dr. Turner's lecture was excellent," commented Mrs. Fordyce. "Bill thought so much of Judy and would have been pleased with her presentation and very proud of her."

Information about the 2013 lecture will be distributed later this year. Questions about the event may be directed to Alice Kim at evonise9@uw.edu.

Upcoming Continuing Education Events:

**REGISTER NOW!**

**DEPARTMENT OF REHABILITATION MEDICINE**

**UNIVERSITY OF WASHINGTON**

**30th Annual Review Course in Physical Medicine & Rehabilitation**

**March 17 - 23, 2013**

*Hotel Deca - 4507 Brooklyn Ave NE, Seattle, WA 98105*

Brochure and registration information available at: uwcmme.org

**SAVE THE DATE!**

**DEPARTMENT OF REHABILITATION MEDICINE**

**UNIVERSITY OF WASHINGTON**

**28th Annual Justus F. Lehmann Symposium**

**May 23, 2013**

*Center for Urban Horticulture, Seattle WA*

“The Role of Outcome Measurement in Rehabilitation Research and Practice: What We Measure and How”

with Carolyn Baum, PhD, OTR/L, FAOTA, Elias Michael Director of the Program in Occupational Therapy at Washington University

For more information, please visit: rehab.washington.edu/education/conteduc.asp
Updates from the PhD in Rehabilitation Science Program

The PhD Program in Rehabilitation Science warmly welcomes the 2012 cohort, its 4th cohort (admission is every other year). The six new graduate students have professional experience in prosthetics-orthotics, occupational therapy, physical therapy and rehabilitation counseling.

The PhD Program enrolled its first cohort in 2006; currently 15 students are working on their doctoral degrees. As of Winter Quarter 2013, eight students have received their PhD in Rehabilitation Science. Cyndi Robinson was the first to defend her dissertation, Identifying Personal Factors Associated with Participation in Community Walking Following Stroke, in 2010. Others include:

- Patti Matsuda, 2010: Falls in Multiple Sclerosis
- Cheryl Kerfeld, 2011: Physical Function Related to Mobility in Children who are Wheelchair Users
- Megan Morris, 2011: Patient-Provider Communication: Perspectives of Individuals with Significant Communication Disabilities
- Cecille Corsilles-Sy, 2012: Effects of Bilateral Task-Oriented Training on Arm Function after Stroke
- Andrew Sawers, 2012: A Gradual vs. Sudden Introduction to Novel Locomotor Task Requirements: Consequences for Motor Learning, Balance Control and Cognitive Demand
- Elena Donoso Brown, 2012: Neurogame Therapy as an Upper Extremity Home Program for Persons after Stroke: A Preliminary Mixed Methods Investigation
- Deanna Britton, 2012: Associations between Laryngeal and Cough Dysfunction in Motor Neuron Disease with Bulbar Involvement

To learn more about our PhD program, please visit: rehab.washington.edu/education/degree/rehabsci/

Drs. Esselman, Hammond Receive Top Honors from AAPM&R

Drs. Peter Esselman and Margaret Hammond received top honors from the American Academy of Physical Medicine and Rehabilitation (AAPM&R) in 2012. Each year, Academy members are asked to nominate pioneering physiatrists, clinicians, and researchers who have made significant contributions to both the specialty and to people with disabilities. Dr. Esselman, professor and chair, received the Distinguished Clinician Award. The award honors individual physiatrists who have achieved distinction on the basis of their scholarly level of teaching and their outstanding performance in patient care activities. Dr. Hammond, professor, received the Distinguished Member Award. This award honors AAPM&R members who have provided invaluable service to the specialty of PM&R primarily through participation in PM&R-related organizations other than the academy. Drs. Esselman and Hammond were presented with their awards at the 44th Walter J. Zeiter Lecture and Awards Ceremony on November 17 at the AAPM&R meeting in Atlanta, Georgia.
Faculty News, Awards & Honors:

Dr. Bell elected Vice President of the AAPM&R Board of Directors

Dr. Kathleen Bell, professor and medical director of the brain injury rehabilitation program, is the new Vice President of the AAPM&R (American Academy of Physical Medicine and Rehabilitation Medicine) Board of Directors. The election was held at the Annual Assembly in November. As Vice President, Dr. Bell is an official representative of the Academy, representing the interests of the entire membership, chairs the awards committee, and is a member of the finance committee. After her one-year term, Dr. Bell automatically becomes President-Elect, followed by President and then Past President. This leadership role is an incredible honor and Dr. Bell is well-suited to the position. Congratulations to Dr. Bell!

Dr. Goldstein: Chief Consultant for SCI/D for the Veterans Health Administration

As of October 9, Dr. Barry Goldstein, professor, is the Chief Consultant for Spinal Cord Injury and Disorder Services (SCI/D) for the Veterans Health Administration (VHA), a position formerly held by Dr. Margaret Hammond. Among his many duties in this national position, Dr. Goldstein is responsible for the content of the SCI/D VHA Handbook, which defines procedures for the operation of the SCI/D System of Care. The VA has the largest single network of spinal cord injury care in the nation. Congratulations to Dr. Goldstein!

Dr. Patterson’s virtual reality for pain control research highlighted on Rock Center

In a segment that aired Nov. 15 on NBC’s Rock Center, Lieutenant Sam Brown discusses how the video game SnowWorld helped ease his pain more effectively than narcotics during treatment for severe burn injuries he sustained on a tour of duty in Afghanistan. SnowWorld is a groundbreaking experiment in virtual reality for pain control developed by Dr. Dave Patterson, professor, and his colleague, Dr. Hunter Hoffman. The video game provides distraction that overwhelms the senses and diverts the brain’s attention away from processing pain signals. In a small 2011 study conducted by the military, SnowWorld worked better than morphine for soldiers in the most pain. Watch “Wounded soldier uses video game to ease pain.”

Dr. Krabak featured expert on KUOW.org story regarding mystery of MS in PNW

This fascinating KUOW.org story explores the mystery of why the Pacific Northwest has one of the highest rates of multiple sclerosis (MS) in the world and how it could lead to new treatments. Dr. George Kraft, professor emeritus and director of the Multiple Sclerosis Rehabilitation Research and Training Center at the University of Washington, shares his expertise on the subject, including why the rates are elevated in our area and potential causes of the disease. Listen to “Search For Cause Of High Rates Of MS In Northwest Could Lead To New Treatments”
Welcome New Faculty

Jeffrey Heckman, D.O., joins the department as an assistant professor and Director of the Regional Amputation Center at the VA Puget Sound Health Care System (VAPSHCS). Dr. Heckman is responsible for program development leading to enhanced care coordination, quality of care, education and research in veterans who have sustained amputations. He specializes in the evaluation and management of the medical and functional aspects of rehabilitation following amputation, including prosthesis prescription, phantom limb pain and musculoskeletal injuries, as well as arthritis-related joint pain and other age-related musculoskeletal conditions. Dr. Heckman earned his osteopathic medical degree (D.O.) from the University of New England and completed his residency training in Physical Medicine and Rehabilitation at the NYU Langone Medical Center, Rusk Institute of Rehabilitation Medicine.

Accolades:

Michael Burns receives ASHA and ASLHF scholarships

Michael Burns, student in the PhD in Rehabilitation Science program, is the recent recipient of two awards. Michael received the Student Research Travel Award (SRTA) to attend the American Speech-Language-Hearing Association (ASHA) Annual Convention in Atlanta, Georgia, November 15–17. This award is given to the highest-rated ASHA Convention paper - with a student as first author - in each of the 26 topic categories. The purpose of the SRTA is to highlight the research activities of students and encourage careers in science and research. Michael presented an hour long seminar entitled, "Preparing Patients with Communication Disorders for Medical Interactions." Drs. Carolyn Baylor and Kathy Yorkston are his co-authors on the paper.

In November, Michael learned that he is one of the 20 recipients of an American Speech-Language Hearing Foundation (ASLHF) New Century Scholars Program Doctoral Scholarship. This $10,000 scholarship supports students enrolled in a research/teaching doctoral program (PhD or equivalent) who demonstrate academic excellence and a commitment to a teacher-investigator career in the field of communication sciences and disorders.

Deanna Britton awarded an ANCDS Fall Conference Scholarship

Deanna Britton, speech-language pathologist and student in the PhD in Rehabilitation Science program, was awarded a Fall Conference Scholarship from the Academy of Neurologic Communication Disorders & Sciences (ANCDS) to attend the annual meeting in Atlanta, Georgia, November 14. The award is highly competitive. Students vie for the 10 scholarship spots by writing an essay expressing their interest in neurogenic communication sciences and disorders. As a scholarship winner, Deanna was assigned a mentor who guided her through the ANCDS Conference experience to insure that she achieved maximal benefits from the conference, including networking with ANCDS members.