Scholarly Activities  
Department of Physical Medicine and Rehabilitation  
June – August 2013

CLINICAL

**Deb Gaebler** and **Citlali Lopez-Ortiz**: Poster presentation “Motor Learning Using Classical Ballet with Feedback of Reduced Dimension in Children with Cerebral Palsy”, Progress in Motor Control IX Meeting, Montreal, July, 2013

**Deb Gaebler** presented at Grand Rounds, Mary Free Bed Rehabilitation Hospital, Grand Rapids, MI, July 12


**Christina Marciniak**:

- **Course Faculty**

**Publications**


**Monica Rho**:


Cushman D, **Rho ME**. Exercise-induced Vasculitis in a Walker. Selected for oral presentation at the American College of Sports Medicine Annual Meeting Indianapolis, IN. June 1, 2013

Blatz D, **Rho ME**. Chronic Achilles Tendinopathy from Underwater Running, Selected for oral presentation at the American College of Sports Medicine Annual Meeting, Indianapolis, IN. June 1, 2013
Shah F, Rho ME. Jersey Finger from Running with a Smartphone. *Selected for oral presentation at the American College of Sports Medicine Annual Meeting, Indianapolis, IN.* June 1, 2013

Reese M, Rho ME. Calcific Tendinopathy in a Runner. *Selected for oral presentation at the American College of Sports Medicine Annual Meeting, Indianapolis, IN.* June 1, 2013


Gayle Spill: "When teams fumble: cancer rehabilitation and the problem of "handoff". In: Ethical Legal Feature, edited by Kristi Kirschner, PM&R, July 2013

**Steven Stanos:**

Presentations:
Annual Spine Summit. Annual meeting of leadership ISIS, NASS, AAPM. Update on Long Acting/Extended Release REMS for long acting opioids. What is happening with training and educational development, August 10, Burr Ridge IL

North American Spine Society Summer Meeting. Presented on lumbar stenosis: Medical Treatment and Medical/Interventional Complications: Avoidance and Management, August 1-2, Naples FL

Dannemiller Pain Review Course. Presented on Functional Anatomy of Upper and Lower Extremities; Extremity Pain: Clinical Diagnosis and Treatment; The Concept of Function, Impairment, Disability and Handicap; Rehabilitation Medicine Approaches to Pain Management: Soft Tissue Injections; and Rehabilitation Medicine Approaches to Pain Management: Interdisciplinary Care and Modalities, July 29-31, Chicago

Primed East, Regional Primary Care Update Course. Presented on Improving care of patients with chronic pain: individualized assessment and mechanism-based multimodal treatment. July 24, New York

Omnia-Prova Education/CME lecture Primary Care. "From guidelines to practice: managing challenging cases in primary care", June 14, Dearborn MI

Outreach, Governmental and Advocacy Projects:
(Consultant/ Invited Working Group Member) The Department of Health & Human Services (DHHS) & Interagency Pain Research Coordinating Committe (IPRCC): as

(Consultant) Federal Drug Administration (FDA) Center for Drug Evaluation and Research, the Clinical Trials Transformation Initiative (CTTI). Workshop Member. August 12, 2013. Silver Springs, MD

Debra Weiner, MD. (Principal Investigator) Low back pain study pilot: clinical efficacy studying older veterans with low back pain and outcomes associated with patient-centered comprehensive evaluation and treatment (PCCT) versus imaging-associated usual care.

NURSING


ALLIED HEALTH

Eric Larson:

Presented “Sleep, Consolidation of New Learning and Neurorehabilitation”, 2013 Sleep and Neuromodulation Symposium. Community Healthcare System, Munster IN, June

CENTER FOR APHASIA RESEARCH AND TREATMENT

New Grant Awards:


Publications:
Presentations:


CENTER FOR REHABILITATION OUTCOMES RESEARCH

Grants Funded since June 2013:

Heinemann: Patient-Centered Outcomes Research Institute, Developing Quality Metrics-Reported Outcomes for Medical Rehabilitation; $654,789 year 1; $1,093,782 3-year cumulative; 9/2013-8/2016

Heinemann: VA, Patient-Centered Care for Persons with Spinal Cord Injuries and Disorders; $43,500 year 1; $68,675; 5/2013-8/2013

Heinemann: Foundation for Physical Medicine and Rehabilitation, Developing outcomes data management and reporting capacity for musculoskeletal rehabilitation programs; $30,000 year 1; 9/2013-8/2014

Grants Submitted since June 2013:

Heinemann: National Institute on Disability and Rehabilitation Research, Advanced Rehabilitation Research Training Project in Rehabilitation Services Research

Ehrlich-Jones: National Institute on Disability and Rehabilitation Research, RRTC Promoting Healthy Aging for Individuals with Long-Term Disabilities (PI: Elliot Roth), R2 Project: Promotion of Physical Activity to Decrease Fatigue and Pain in Persons with Spinal Cord Injury, Multiple Sclerosis, and Cerebral Palsy.
**Ehrlich-Jones/Heinemann:** National Institute on Disability and Rehabilitation Research, RERC for Individual Mobility and Manipulation in Prosthetics and Orthotics (PI’s: Stefania Fatone & Steve Gard) Expanding Clinical Outcome Measures for P&O: Development and Dissemination.

**Ehrlich-Jones:** PCORI, Assessment of Prevention, Diagnosis, and Treatment Options (PI: Sherri LaVela) Patient-centered weight management treatment for overweight/obesity in persons with spinal cord injuries.

Wong: Craig H Neilsen Postdoctoral Fellowship (Full grant submission, July 15, 2013)

Grants in Preparation since June 2013:

**Heinemann:** NIDRR, Development of an Online VR Assessment and Service Protocol to Enhance Employment of Individuals with Disabilities

**Ehrlich-Jones:** Paul Ruby Foundation for Parkinson’s Research Grants Initiative, Promotion of Physical Activity to Improve Balance and Quality of Life in Persons with Parkinson’s disease

Manuscripts published (not in press) since June 2013:


Presentations since June 2013:


**Deutsch A.** The Inpatient Rehabilitation Facility Quality Reporting Program. The Uniform Data System for Medical Rehabilitation Conference, Niagara Falls, NY. August 8, 2013.

Technical Reports:


Service Activities:

**Allen Heinemann**
Co-Editor-in-Chief, Archives of Physical Medicine and Rehabilitation
Chair, Outcomes Measurement Networking Group, American Congress of Rehabilitation Medicine

**Linda Ehrlich-Jones**
Judge, Annual PM&R Research Day

**NUPOC / REHABILITATION ENGINEERING RESEARCH CENTER**

Publications:

**Johnson WB, Fatone S, Gard SA** "Modeling the effects of sagittal-plane hip joint stiffness on Reciprocating Gait Orthosis Assisted gait." Accepted for publication in Journal of Rehabilitation Research and Development.

**Major M, Fatone S, Roth E** “Validity and reliability of the Berg Balance Scale for individuals with lower limb amputation.” Accepted for publication in Archives of Physical Medicine and Rehabilitation.

Presentations:


Stefania Fatone, PhD, was co-author of two presentations given at PM&R Grand Rounds: (1) "Do We Pay Heed to the Purported Benefits of Partial Foot Amputation at the Expense of Minimizing Complications?" presented by Dr. Michael Dillon, Ph.D. on July 3, 2013. (2) “Enhancing Healthcare Services with Process and Outcome Information” presented by Dr. Linda Ehrlich-Jones, Ph.D. on July 31, 2013.

Defenses:


Laboratory Visits:

Northwestern University Prosthetics-Orthotics Center (NUPOC) hosted a 3-day visit (July 1-3, 2013) by Dr. Michael Dillon, PhD, BPO(Hons), Senior Lecturer at the National Centre for Prosthetics and Orthotics, La Trobe University, Melbourne, Australia. During his visit to NUPOC, Dr. Dillon presented formal and informal presentations about P&O curriculum development, mock classes, and research topics in P&O. Also, he presented the weekly Research Meeting on "Seven Secrets of a Master's Curriculum in Prosthetics and Orthotics."

The Northwestern University Prosthetics-Orthotics Center (NUPOC) hosted an educational program and site visit for graduate students of the Rush Occupational Therapy Program on July 10, 2013.

The Northwestern University Prosthetics-Orthotics Center (NUPOC) hosted an educational program and site visit for the Biotechnology Group of the National Student Leadership Conference (NSLC) on August 5th, 2013. NSLC students and representatives from the Northwestern University Global Health Initiative learned about biomechanics of human gait and biomedical measurements with respect to prosthetics and orthotics. They also participated in research demonstrations and hands-on biotechnology activities.

Meetings:

Stefania Fatone, Ph.D., and John Michael, CPO, were invited to attend a meeting hosted by the American Academy of Orthotists and Prosthetists SSC Planning Conference held in Rosemont IL on July 26-27, 2013.
Steven A. Gard, Ph.D. and Stefania Fatone, Ph.D., BPO (Hons.) attended the annual National Institute on Disability and Rehabilitation Research (NIDRR) RERC Project Director's meeting in Alexandria, VA, August 8-9, 2013.

Grant Awards:

Gard, S. and Major, M. “Fall risk and prosthetic influence on gait biomechanics in upper limb amputees.” Received notification of intent to fund by Department of Veterans Affairs, Rehabilitation Research & Development Service.

Grant Submissions:

Fatone, S., Co-investigator on “Wireless Epidermal Sensing & Control Architecture for Prostheses (WISP).” Defense Health Program SBIR Phase I application, submitted June 2013. PI on the project was Barry Ives at mc10 Inc.


Major, M. “Sensory-motor mechanisms underlying fall risk in Transtibial amputees.” Submitted to the Department of Veterans Affairs for the June 15th deadline.


Letter of Intent Submissions:

Gard, S. “Effect of prosthesis stiffness on impact force during in vivo step loads and gait.” Submitted to the Department of Veterans Affairs for the Aug 1st deadline.

SENSORY MOTOR PERFORMANCE PROGRAM


Dvorkin, AY: Presented “Virtual Reality and Robotics Technology in the Assessment and Rehabilitation of Attention Following Brain Injury. Department of O.T, Midwestern University, Downers Grove IL, July 10


Brenna Argall – Invited Talk at the RSS Robotics Conference 2013 Workshop on Human Robot Collaboration Germany

Zev Rymer:
Publications:


Other Activities:
June 10-13. Advisor for BME/Hong Kong Polytechnic University in Hong Kong
June 17-18. Hosted R24 Annual Retreat at the RIC
June 24-25. Participated at ICORR 2013 in Seattle, WA
July 2. Reviewer for Wellcome Trust Innovative Engineering for Health Committee Meeting in London, UK
July 8-10. Mentor for Motor Control Summer School MCSS-X in Ligonier, PA
July 26. Participated in MARS3 Advisory Council Meeting at the RIC
July 30-31. Collaboration Meeting at Ekso Bionics in Richmond, CA


Li-Qun Zhang presented at International Society of Physical Rehab Med, "Robotic offaxis sensory-motor rehabilitation of musculoskeletal injuries and neurological disorders", Beijing, China, June 2013

OTHER FACULTY