



SCHOOL OF HEALTH AND REHABILITATION SCIENCES

INDIANA UNIVERSITY
IUPUI

Dean's Update

July - September 2010

Student Activities/Accomplishments:

- The Physical Therapy Department welcomed 38 new students to the Program on August 12th. Orientation was filled with day long presentations from faculty, students and alumni focusing on expectations for the next three years.
- OT Students volunteered at the Indiana State Fair participating in the Riley Hospital for Children in the Children's Interactive Park section of the Fairgrounds. They assisted parents in screening for developmental delays, had children participate in an obstacle course, (observing motor planning, psychosocial, gross/fine motor and cognitive skills) and provided printed material about the resources available at Riley for Safety in the Home.
- The Health Sciences Department formally admitted its first students to the BS in Health Sciences degree program this fall. We started the semester with 17 new students.
- The second and third year PT classes (2011 & 2012) successfully completed all of their summer internship work with excellent feedback from their clinical instructors. Both classes have begun fall coursework.
- Second year OT students traveled to the AOTA Annual Conference and Exposition in Orlando in April. They will be sharing their experiences during a Student Occupational Therapy Association (SOTA) meeting on October 25th for the students who were unable to attend.
- The Health Sciences Department admitted 2 new students to the PhD in Health and Rehabilitation Sciences degree program for a total of 16 students currently enrolled.

Student Research Presentations

- **Strandberg S, Crozier T, Heighway J, Gregory Z, Barnes A, Dierks T, Bayliss AJ.** The Relationship Between Wii Fit Age and Self-Reported Physical Activity Level in Older Adults. Indiana Chapter, APTA Fall Conference
- **Backler J, Strunk V, Bayliss AJ.** Empathy in Physical Therapy: Why Should We Care? Indiana Chapter, APTA Fall Conference
- **Gundek EL, Clayton G, Bayliss AJ, Loghmani MT.** Treatment of a Guitarist with a finger joint sprain using instrument-assisted soft tissue mobilization: A Case Study. Indiana Chapter, APTA Fall Conference

Community Engagement

- On September 10th, Dr. Bayliss along with several third year DPT students attended the 2010 Healthy Older People's Program Conference and completed balance screenings on the Wii Fit.

Faculty Activities/Accomplishments:

Welcome

To Dr. Fengyi Kuo, DHS, MA, OTR, CPRP, Clinical Assistant Professor who joined the OT faculty this fall. Prior to this position, she served six years on the OT faculty at the University of Indianapolis. Dr. Kuo is an occupational therapist with more than 15 years of international practice experience across the lifespan. She received her BS in Occupational Therapy from the Department of Rehabilitation Medicine from Kaohsiung Medical University in Kaohsiung, Taiwan, post-professional Master of Arts in Occupational Therapy degree from New York University, and Doctor of Health Sciences (DHS) from the University of Indianapolis in 2008. She holds certification in Sensory Integration through Western Psychological Services/University of Southern California and is a Certified Psychiatric Rehabilitation Practitioner. She has published several papers in peer-reviewed journals and made numerous presentations at local, national, and international conferences. She has received grants from the Alzheimer's Association, and the Center for Healthy Communities to support her research in community-based practice. Her interests are *Dementia Caregiver Role Changes*, *Meeting the Needs of Caregivers*, *Evidence-Based Practice in Psychiatric Rehabilitation*, and *Katrina Kids Program Development and Evaluation*. She is a reviewer of grants for the Office of Special Education and Rehabilitation Services through the US Dept of Education.

International Activities

- Dr. Kuo has been selected as one of 60 distinguished practitioners to participate in the Global Mental Health: Trauma and Recovery Certificate Program offered by Harvard School of Medicine. She will be completing the Certificate Program through both an on-site learning in Orvieto, Italy in November and an intensive five month Web-based program of supervision, case presentations, and academic discussions immediately following the training in November.

National Activities

- Dr. Kuo has been accepted as an item writer for the NBCOT exam.
- Dr. Dierks was featured on a podcast interview for *PT Talker* discussing his research findings on "Hip Exercises Reduce Runner's Knee".
- Dr. Fisher continues his role as a Director on the AOTA Board of Directors.

Regional/State Activities

- On September 2nd the Robotics Rehabilitation Center had an official open house. The Center represents a collaborative effort between Riley Hospital for Children, Section of Developmental Pediatrics, Clarian Rehabilitation Services, and the Indiana University

Department of Physical Therapy. The Center is supported by the contributions from “Robots to the Rescue” and the United Cerebral Palsy Association of Greater Indiana. It provides a unique opportunity to combine both clinical treatment approaches with experimental research designs to maximize outcomes and impact motor function for children.

- Karyl Rickard, PhD attended “Coaching Fundamentals” the first part of a five part series for Coach Training at the Coaches Training Institute held at the University of Illinois at Chicago in August.
- Arlene Schmid, PhD, OTR was awarded one of the Indy’s Best and Brightest award in the Top 10 in Health Sciences.
- Michael Justiss, PhD, OTR, continues his research with the transportation Active Safety Institute (TASI) and will begin phase III study as Co-PI on the Federally Highway Administration (FHWA) funded project designed to investigate Human Factors for Limited Ability Autonomous Driving systems.

Community Engagement

- Dr. Dierks and Dr. Altenburger, along with Ryan Cardinal SHRS PhD student, participated in a fundraising event for Robots to the Rescue held at Conseco Fieldhouse. Proceeds from the event will be used to support the Robotics Rehabilitation Center at Riley Hospital.

Publications

Peer-reviewed Publications

- **Schmid AA**, Wells C, Concato J, Dallas M, Lo A, MD, Nadeau S, Williams L, Peixoto A, Gorman M, Boice J, Struve F, McClain V, Bravata D. The prevalence, predictors, and outcomes of post-stroke falls in acute hospital setting. *Journal of Rehabilitation Research and Development*, 2010, 47 (6): 553-562.
- **Schmid AA**, Van Puymbroeck M , Damush T, Spangler C, Knies K, Watts K. Williams L. Fear of Falling among Subjects Who Have Sustained a Stroke: A Six Month Longitudinal Pilot Study. In Press, *American Journal of Occupational Therapy*, 2010.
- **Liu, C.-J.**, LaValley, M., & Latham, N (In Press). Do unblinded assessors bias muscle strength outcomes in randomized controlled trials of progressive resistance strength training in older adults? *American Journal of Physical Medicine and Rehabilitation*.
- **Liu, C.-J.**, & Latham, N (2010). Reporting adverse events in progressive resistance strength training trials in older adults. *Archives of Physical Medicine and Rehabilitation*, 91, 1471-1473.
- Latham, N., & **Liu, C.-J.** (2010). Strength training in older adults: The benefits for osteoarthritis. *Clinics in Geriatric Medicine*, 26, 445-459.
- Swinford RR, **Warden SJ**: Factors affecting short-term precision of musculoskeletal measures using peripheral quantitative computed tomography (pQCT). *Osteoporosis International* 2010;21:1863-70.
- **Sturman MM**, Vaillancourt DE, Metman LV, Bakay RA, Corcos DM. Effects of five years of chronic STN stimulation on muscle strength and movement speed. *Exp Brain Res*. 2010; Sep;205(4):435-43.

- Morley JB, Decker LM, **Dierks TA**, Blanke D, French JA, Stergiou N. Effects of varying amounts of pronation on the mediolateral ground reaction forces during barefoot versus shod running. *Journal of Applied Biomechanics*, 2010;2:205-214.
- **Dierks TA***, Davis IS, Hamill J. The effects of running in an exerted state on lower extremity kinematics and joint timing. *Journal of Biomechanics*, 2010; in-press.
- **Dierks TA***, Manal KT, Hamill J, Davis I. Lower extremity kinematics in runners with patellofemoral pain during a prolonged run. *Medicine and Science in Sports and Exercise*, 2010; in-press.

Abstracts

- **Loghmani MT, Warden SJ**. Instrument-Assisted Cross Fiber Massage Alters Regional Microvascular Morphology in Healing Knee Ligaments Suggesting Possible Angiogenesis. APTA Combined Sections Meeting.
- **Loghmani MT**, Gundeck EL, Clayton G, **Bayliss A**. Instrument-assisted Soft Tissue Mobilization for Treatment of a Finger PIP Strain in a Guitarist: A Case Study. APTA Combined Sections Meeting.
- **Altenburger P**, Scott P, Kean J. A Community-based Collaborative Partnership to Enhance Student Learning of Evidence-Based Clinical Decision-making. APTA CSM Feb 2011.
- **Bayliss AJ**, Whaley Z, Krueger N, Lim S. Comparison of 2 models of service learning within a DPT program: success through student-faculty collaboration. APTA CSM Feb 2011 poster presentation.
- Backler J, Gabet J, Strunk V, **Bayliss AJ**. Measurement of empathy changes during a physical therapist's education and relationship to gender. APTA CSM Feb 2011 platform presentation.
- Phipps RL, Carney SR, **Loghmani MT, Bayliss AJ**. An innovative manual therapy approach for the treatment of patients with Achilles tendinopathy: a case series. APTA CSM Feb 2011 poster presentation.
- "Estimates of Body Composition in Drug Naïve Asymptomatic HIV Infected Rural Kenyan Women" **Judith Ernst**, Grace Etyyang, Adrian Katschke, Brian Lewis and Charlotte Neumann at the International AIDS Society meeting in Vienna Austria, July 18-23.

Presentations

- "Weight & Diet in Older Adults" **Dr. Sara Blackburn**. Geriatric Grand Rounds IUSM, September 29, 2010.
- "Nutrition and the Elderly" **Dr. Sara Blackburn**, Second Year Master of Occupational Therapy Students, invited presentation. September 27, 2020.
- Robling AG, **Warden SJ**, Paszty C, Turner CH: Sclerostin antibody protects the skeleton from disuse-induced bone loss. American Society of Bone and Mineral Research 32nd Annual Scientific Meeting, Toronto, Canada.
- **Loghmani MT**, Gundeck EL, Clayton G, **Bayliss A**. Instrument-assisted Soft Tissue Mobilization for Treatment of a Finger PIP Strain in a Guitarist: A Case Study. INAPTA Annual Conference.

Research/Grants

- Supplemental Award “Increasing Animal Foods in Diets of HIV Infected Women and Their Children” \$540,000 from National Institutes of Health for the period August 2010-July 2012. **Judith Ernst** (PI) IUPUI, Lindsay Allen USDA, ARS, WHNRC, Grace Etyyang MOI University, Charlotte Neumann UCLA, Duncan Ngare, Winstone Nyandiko and Abraham Siika all of Moi University. The supplemental award brings the Year 3 funding for the project to a grand total of \$874,588.
- Supplemental Award “Leadership Education Excellence in Pediatric Nutrition” \$7,000 from the Health Resources Administration, Maternal Child Health Bureau for enhanced development of leadership training materials for MCHB programs. **Karyl Rickard** (PI) Supplemental funding for the project brings the grand total for this year’s grant to \$180,090.
- **Dr. Arlene Schmid** received a \$5000 grant with a PT investigator (Dr. Stephanie Combs) at UIndy. *Comparison of Short Bursts of Body Weight Supported Treadmill Training versus Overground Walking Training in Participants with Chronic Stroke.*
- **Dr. Arlene Schmid** is a co-investigator on an R01 for Alzheimer’s with OT as the intervention. Carrie Spangler- Morris, MS, OTR (former OT student) will be the OT providing the intervention for the study- Chris Callahan, MD, MPH is the PI, \$2,824,191 over 3 years Alzheimer’s Disease Multiple Intervention Trial – ADMIT.

Other Scholarly/Service Activities

- Patricia Scott, PhD, MPH, OT, FAOTA has been selected to participate in the Teaching and Learning with Mobile Tablets Faculty Learning Community (FLC) in the Health Professions.