



SCHOOL OF HEALTH AND REHABILITATION SCIENCES

INDIANA UNIVERSITY
IUPUI

Dean's Update

January-March 2010

Student Activities/Accomplishments:

- The Department of Health Science admitted six new students to its PhD program. This brings the total number of students in the program to 15.
- The Department of Health Sciences received approval from the Board of Trustees to implement the BS in Health Sciences. We will begin admitting students this fall.
- The Master in Physician Assistant Studies proposal was approved by the IUPUI Graduate Affairs Committee and the IU Academic Leadership Council.
- First time passing rate for Dietetic Internship Program on the national Registration Examination for Dietitians was 100% (national passing rate for Dietetic Internship Programs – 87% for the same period) which brings the five year passing rate for the Dietetic Internship Program to 88%. The five year average passing rate for dietetic internship programs is 80%.
- Dietetic internship class visited the Fishers, Indiana U.S. Foods facility in February. The class participated in a can-cutting of vegetables, fruits, soups and prepared foods illustrating differences in food grade, yield and preservation methods. Activities included presentations on the role of food brokers and prime vendors and a tour of the U.S. Foods warehouse.
- In conjunction with the NCAA Final Four, dietetic interns Amanda Adkins, Jackie Bauch and Mandy Kenyon, taught sports nutrition education classes held at Butler University and the University of Indianapolis. This activity was part of the Vitaminwater® sponsored Youth Clinics.
- Three occupational therapy student research groups had their research accepted for presentation at AOTA this April in Orlando.
- The American Physical Therapy Association held its Combined Section Meeting in February 17th through the 21st. Faculty, students, and alumni participated in multiple presentations during the meetings in San Diego. The list below highlights student led platform and poster presentations.
 - Brandon McGaughey, Frank Klene, Amy Bayliss, Robyn Fuchs. Pharmaceutical agents used to treat osteoporosis: implications for designing effective interventions. (Platform)

- Heather Smith, Elizabeth Bogenschutz, Amy Bayliss, Peter Altenburger, Stuart Warden. Publication of abstracts presented at the Combined Sections Meeting: do we publish what we preach? (Platform)
- Elizabeth Bogenschutz, Heather Smith, Stuart Warden. Throwing induces substantial torsional adaptation within the midshaft humerus of male baseball players. (Platform)
- Bethany Holder, Kristin Dreibelbis, Heather Smith, Erica White, James Heighway, Renee Schlabach, Toni Robinson, Valerie Strunk, Amy Bayliss. Outlooks and Opinions of Practicing PT's regarding Direct Access in Indiana. (Poster)

Faculty Activities/Accomplishments:

Publications

Peer-reviewed Publications

- Feher A, Koivunemi A, Koivunemi M, **Fuchs RK**, Burr DB, Phipps RJ, Reinwald S, Allen MR: Bisphosphonates do not inhibit periosteal formation in estrogen deficient animals and allow enhanced bone modeling in response to mechanical loading. *Bone* 2010;46:203-207
- Golomb MR, McDonald B, **Warden SJ**, Yonkman J, Saykin A, Shirley B, Huber M, Rabin B, Abdelaky M, Nwosu M, Barkat-Masih M and Burdea G: In-home virtual reality videogame telerehabilitation in adolescents with hemiplegic cerebral palsy. *Archives Physical Medicine and Rehabilitation* 2010;91:1-8
- Haney EM, **Warden SJ** and Bliziotis MM: The effects of selective serotonin reuptake inhibitors on bone health in adults: time for recommendations about screening, prevention and management? *Bone* 2010;46:13-17
- Komatsu DE and **Warden SJ**: The control of fracture healing and its therapeutic targeting: improving upon nature. *Journal of Cellular Biochemistry* 2010;109:302-11
- **Mac Kinnon J**, Friedrich-Nel H. Allied health programs outcomes assessment in an international context: an example from South Africa. *Journal of Allied Health*, 2010, 39(1), 7-10
- **Warden SJ**: Extreme skeletal adaptation to mechanical loading. *Journal of Orthopaedic and Sports Physical Therapy* 2010;40:188
- **Warden SJ**, Hassett SM, Bond JL, Rydberg J, Grogg JD, Hilles EL, Bogenschutz ED, Smith HD, Fuchs RK, Bliziotis MM and Turner CH: Psychotropic substances have contrasting skeletal effects that are independent of their negative effects on physical activity levels. *Bone* 2010;46:985-92
- Warden SJ, Robling AG, Haney EM, Turner CH and Bliziotis MM: The emerging role of serotonin (5-hydroxytryptamine) in the skeleton and its mediation of the skeletal effects of low-density lipoprotein receptor-related protein 5 (LRP5). *Bone* 2010;46:4-12

Published abstracts

- Smith HD, Bogenschutz ED, **Bayliss AJ**, **Altenburger P**, **Warden SJ**: Publication of abstracts presented at the Combined Sections Meeting: do we publish what we preach? *Journal of Orthopaedic and Sports Physical Therapy* 2010;40:A18-A19
- Bogenschutz ED, Smith HD, **Warden SJ**: Throwing induces substantial torsional adaptation within the midshaft humeral of male baseball players. *Journal of Orthopaedic and Sports Physical Therapy* 2010;40:A33-A34
- **Loghmani MT**, Herriott A, Kastner K, Meade K, Risner K, **Warden SJ**: Instrument-assisted cross fiber massage improves regional blood flow in healing knee ligaments at delayed

time points following treatment. *Journal of Orthopaedic and Sports Physical Therapy* 2010;40:A14-A15

Presentations

- **Loghmani MT, Warden SJ.** Instrument-assisted cross fiber massage improves regional blood flow in healing knee ligaments. National APTA Combined Sections Meeting 2010. (Platform)
- **Bayliss AJ,** Klene FJ, Gundeck EL, **Loghmani MT.** Treatment of a patient with post-natal calf pain utilizing instrument-assisted soft tissue mobilization. National APTA Combined Sections Meeting 2010. (Platform)
- **Warden SJ:** Tips for successful scientific writing, 2nd South Central American Society Biomechanics Conference, Denton, TX. Kevin Granata Keynote Lecture

Research/Grants

- Dr. Tracy Dierks, director of the Motion Analysis Research Laboratory (MARL) in the Department of Physical Therapy, has been awarded a grant from Biomechanics Consulting and Research (BioCore). The grant is entitled “Lisfranc fractures and turf toe – determination of injury mechanisms and thresholds for elite athletes”. Dr. Dierks will be working with the Center for Applied Biomechanics at the University of Virginia to examine foot kinematics and kinetics in American football players.
- Dr. Michael D. Justiss, PhD, OTR begins the second phase of a Federal Highway Administration (FHWA) funded project investigating Human Factors for Limited Ability Autonomous Driving Systems. Information from these evidence-based literature reviews will be used to update the Occupational Therapy Practice Guidelines for Adults with Low Vision.
- Dr. Christina Mushi-Brunt received \$22,300 from the American Cancer Society Institutional grant for a pilot study on socioeconomic disparities in the nutrition environment and access to ACS recommended food items.
- Dr. Stuart Warden was co-investigator on a \$1,062,982 grant awarded by the Department of Defense for three years to look at the impact of different agents on bone health.

Other Scholarly/Service Activities

- Dr. Joyce Mac Kinnon received a two-year appointment as a visiting professor to the Central University of Technology in Bloemfontein, South Africa. She is one of 59 women recognized in the “Women Creating Excellence at IUPUI: An Online Exhibit”, developed by the Office of Women.
- Prof. Strunk and Dr. Altenburger, with the help of the rest of the faculty revised existing curricular changes that will provide students with a more comprehensive educational experience.
- Dr. Fuchs travelled to Beijing, China to give an invited talk “Unraveling the role of periostin in bone” at the 8th International Conference on Bone and Mineral & 10th International Osteoporosis Symposium.
- Dr. Warden was invited to give the Kevin Granata Keynote Lecture at the 2nd South Central American Society Biomechanics Conference in Denton, TX.
- Dr. Amy Bayliss assisted the Federation of State Boards of Physical Therapy with advanced item writing for the national PT exam and competency activity to finalize the Orthopedic Practice Review Tool.

- In March Dr. Judy Ernst reviewed grant applications as a part of the Review Committee of NIH AIDS Clinical Trials Epidemiology Group which met in Los Angeles, CA.
- Dr. Karyl Rickard assisted by Dr. Sue Brady (professor emerita) participated in the revision of the nutrition component of the national guidelines for nutrition. "Bright Futures in Practice: Nutrition" 3rd edition sponsored by the American Academy of Pediatrics provides national guidelines for promoting the health of the nation's children.
- Peter Altenburger, Valerie Strunk, Amy Bayliss, and Terry Loghmani presented their initial findings on the implementation of a case family series as a longitudinal model for case based learning at the annual EC Moore Symposium at IUPUI.
- Dr. Sara Blackburn participated in the March Mini-Medical School session "Why Are We Getting Fatter?" with Dr. Ann Zerr of the IU National Center of Excellence in Women's Health.
- Thomas Fisher, PhD, OTR, CCM, FAOTA served as an expert reviewer for a special issue of AJOT on musculoskeletal disorders and as a facilitator at the Spring 2010 meeting of professional program directors in Orlando with the focus on developing, enhancing or sustaining a research enterprise in an academic setting.
- Dr. Amy Bayliss provided an in-service to the Hendricks Regional Health Physical therapy department on "Evidence based medicine approach for the sacroiliac joint dysfunction"
- Dr. Michael D. Justiss, PhD, OTR worked with his student research group from the class of 2009 to present a paper at the American Occupational Therapy Association's annual conference in April of this year. Dr. Justiss was also invited as a reviewer by the AOTA for an evidence-based literature review project to examine the effectiveness of low vision interventions on driving and community mobility in older adults.