

Health and Rehabilitation Sciences **<http://shrs.iupui.edu/>**

During the 2010-2011 academic year, the faculty of the IU School of Health and Rehabilitation Sciences (IU SHRS) participated in numerous activities aimed at promoting the vision of the School “to be recognized nationally and globally as a leader in graduate health and rehabilitation sciences education and a provider of excellent health care professionals for the state of Indiana and beyond”. The purpose of this report is to highlight significant achievements of the school with a specific focus on teaching and learning; research and scholarship; service; and program development activities.

Teaching and Learning

- SHRS is expanding its programs with the addition of a Master of Physician Assistant Studies program. The application for provisional accreditation was submitted to the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) and a site visit was conducted in May, 2011
- Faculty published 36 articles in peer-reviewed journals, presented 13 abstracts, and gave 34 peer-reviewed presentations and nation and international conferences.
- Ten (10) students received named fellowship and scholarship awards.
- Thirty-four (34) presentations were made at regional and national conferences by SHRS students.
- Fengyi Kuo, DHS, OTR, CPRP 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.
- Joyce Mac Kinnon, EdD, PT, hosted Hesta Friedrich-Nel, PhD, director of the School of Health Technology, the Central University of Technology in Bloemfontein, South Africa, for a three month Fulbright Scholar program. Dr. Friedrich-Nel’s focus was on formative assessment of graduate work.
- Arlene Schmid, PhD, OTR was awarded one of the Indy’s Best and Brightest award in the Top 10 in Health Sciences.
- Patricia Scott, PhD, MPH, OT, FAOTA participated in the Teaching and Learning with Mobile Tablets Faculty Learning Community (FLC) in the Health Professions.
- Valerie Strunk, MS, PT, co-taught her first Clinical Instructor Credentialing and Education course through the APTA.
- Under the supervision of Peter Altenburger, PhD, PT, Physical Therapy students enrolled in P645 Evidence Based Critical Inquiry course summarized and presented evidence based reports on topics selected by therapists at Rehab Hospital of Indiana (RHI).
- The PhD in Health and Rehabilitation Sciences degree program admitted four new students in spring 2011. There are 18 active students enrolled in the program.
- Master of Science in Nutrition & Dietetics Program graduated three students this year and admitted six new students.

Research, Scholarship, and Creative Activity

Faculty of the IU SHRS submitted 11 new external grant applications totaling \$1,534,831.00 of which 3 were funded in the amount of \$657,916 and served as PI/Co-PI on continuing grants totaling \$2,720,704. Provided below are highlights of major grants received/ongoing this year.

Investigator: Tracy Dierks
Title: Increasing Lisfranc fractures and turf toe _ determination of injury mechanisms and thresholds for elite athletes
Amount: \$28,248
Funding Agency: Biomechanics Consult

Investigator: Judith Ernst
Title: Increasing Animal Foods in HIV-infected Kenyan Women and Their Children
Amount: \$874,558
Funding Agency: NIH-NICHD

Investigator: Robyn Fuchs
Title: The Role of Periostin in Bone Formation
Amount: \$120,085
Funding Agency: NIH-NICHD

Investigator: Karyl Rickard
Title: Leadership Education Excellence in Pediatric Nutrition
Amount: \$180,090
Funding Agency: HRSA

Investigator: Stuart Warden
Title: Sustainability of exercise-induced increases in bone structure and estimated strength
Amount: \$564,312
Funding Agency: NIH-NIAMS

Investigator: Stuart Warden
Title: Extent, causes, and countermeasures of impaired fracture healing in hypogravity
Amount: \$259,871
Funding Agency: National Space Biomed Institute

- Tracy Dierks, PhD, was featured on a podcast interview for *PT Talker* discussing his research findings on “Hip Exercises Reduce Runner’s Knee”.
- Arlene Schmid, PhD, was named a Regenstrief Investigator. She is the only OT in this internationally known research institute.
- Stuart Warden, PhD, PT, FACSM, recorded a podcast for the *Physical Therapy* journal manuscript “Full-text publication of abstract-presented work in physical therapy: do therapists publish what they preach?” (<http://ptjournal.apta.org/content/91/2/234/suppl/DC1>)
- The IU SHRS Department of Physical Therapy, Riley Hospital for Children, Section of Developmental Pediatrics, and Clarian Rehabilitation Services collaborated to establish the Robotics Rehabilitation Center.
- The Department of Nutrition and Dietetics received a bequest from Arlene Wilson for \$50,000.

Civic Engagement

SHRS is very supportive of the efforts of faculty and students to engage in service-learning and civic activities. A few highlights of our community engagement for this year include:

- Occupational Therapy students volunteered at the Indiana State Fair participating in the Riley Hospital for Children in the Children's Interactive Park section of the Fairgrounds.
- Twenty (20) 2nd year Occupational Therapy students, 15 1st year Occupational Therapy students and 3 Occupational Therapy faculty members participated in the 2010 Memory Walk on the IUPUI campus.
- The Pi Theta Epsilon Honor Society in the Occupational Therapy dept. collected 549 non-perishable food items during their annual food drive for Gleaners Food Bank in Indianapolis.
- Occupational Therapy students volunteered at a Pink Paddle Party raising money for a breast cancer dragon boat paddling group – a group activity to enhance recovery after breast cancer.
- Physical Therapy students attended and participated in the fall meeting of the Indian Chapter of the American Physical Therapy Association.
- SHRS exceeded the goal set by IUPUI for the IMPACT campaign.
- Tracy Dierks, PhD and Peter Altenburger, PhD, PT, 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.
- Gaylen Kelton, MD, provided faculty oversight in January and March at the IU Student Outreach Clinic.
- Fengyi Kuo, DHS, OTR, CPRP, was appointed chair of the advisory board for the programming committee for the Heritage Place of Indianapolis, Inc.
- Fengyi Kuo, DHS, OTR, CPRP, conducted community outreach at the Jameson Camp Health Fair for Indiana University Health, Riley Hospital for Children, Community Education and Child Advocacy.
- Fengyi Kuo, DHS, OTR, CPRP, was appointed to the Board of Directors for the Burmese Community Center for Education (BCCE) in Indianapolis, IN.
- Terry Loghmani, PhD, PT, provided a presentation on instrumented soft tissue mobilization to therapists at the Veterans Administration Hospital.
- Christina Mushi-Brunt, PhD, MPH, established a partnership with the Near West Indy Collaborative to develop health initiatives for its five-year Quality of Life Plan. Dr. Mushi-Brunt will study community produce gardens as a promising strategy to address disparities in food access and produce consumption among residents in low income communities.
- Patricia Scott, PhD, MPH, OT, FAOTA, was interviewed about her research on recovery post-transplant for the show “Full Circle” that aired Nov. 2, 5, and 11, 2010 on channel 40 in Noblesville, IN.

Diversity

Our commitment to diversity is reflected in the school's mission statement and in the recently adopted five-year plan. Some highlights from the past year in this area include:

- In collaboration with the Schools of Medicine and Dentistry, and the Office of Diversity, Equity and Inclusion, SHRS sponsored a presentation on “Black Hospitals in America: History, Development and Contributions” on September 3, 2010. The presenter Nathaniel Wesley, MHA FACHE, has conducted research in this area for over 30 years and is national renown on this subject.
- The SHRS website was updated to highlight diversity activities (<http://shrs.iupui.edu/diversity/index.html>).

Best Practices

SHRS is committed to using the latest information and technology to achieve and promote the best teaching and learning outcomes for faculty and students and to increase the visibility of the school. Our current thinking is that the impact of our use of best practices can best be measured by, among other things, (a) student performance on licensure examination, (b) accreditation status of our programs, and (c) ability to stay connected with our alumni and friends. Provided below are highlights of student performance on licensure/certification examinations and program accreditation status and the school’s effort to reach out to alumni.

- The first-time pass rate for the Physical Therapy Class of 2010 was 96.7% compared to the national average of 89.1%.
- The first-time pass rate for the Occupation Therapy Class of 2010 was 94% compared to the national average of 82%.
- The first-time pass rate for the Department of Nutrition and Dietetics class of 2010 was 62% compared to the national average of 88%. The department conducted a survey of the class of 2010 and determined what factors contributed to the class’ performance. The resulting plan was implemented in April 2011.
- All of our programs are accredited by their respective accreditation agencies.
- The School continues to work in collaboration with the Office of Alumni Relations and SHRS Alumni Board to present the school’s distinguished alumni award.
- The School published the third annual edition of IMPACTS, a magazine designed to provide our friends and benefactors with regular updates on the accomplishments of faculty/alumni/students; increase the visibility of the school; and to highlight the outcomes of our strategic plan and other important events (<http://shrs.iupui.edu/about/impacts.html>).

External Awards and Appointments

- Deborah Abel, Visiting Lecturer of Nutrition & Dietetics; Coordinator, Leadership Education in MCH Nutrition (Pediatric Focus); and PhD candidate in the School of Health and Rehabilitation Sciences (SHRS) was recently issued a patent for her systematic approach to recording, calculating and presenting nutritional data specifically related to the feeding and resulting growth outcomes of very low birth weight (VLBW) infants.
- Amy Bayliss, PT, DPT, received an Outstanding Service Award from the Federation of State Boards of Physical Therapy, in Oct. 2010.
- Tracy Dierks, PhD, Peter Altenburger, PhD, PT, Ryan Cardinal, DPT, along with Deborah Hamby, MD, and Pauline Flesch were awarded the Anita Slominski Caring Award from the United Cerebral Palsy Association of Greater Indiana in March, 2011.
- Brian Duff, Occupational Therapy student, won the Carol D. Nathan Leadership Award.

- Robyn Fuchs, PhD, was invited to be a member of the Editorial board for the *Journal of Osteoporosis*.
- Fengyi Kuo, DHS, OTR, CPRP, was an elected delegate of 2010-2011 to represent the Pan-Pacific & South-East Asia Women's Association (PPSEAWA) of Taiwan, ROC for its participation at the United Nations' 55th session of Commission on the Status of Women in 2011. The conference took place at the United Nations' Headquarters in NYC.
- Fengyi Kuo, DHS, OTR, CPRP, has been invited to serve as faculty facilitator for the Sino-NMA (Norwegian Mission Alliance) curriculum development project for OT Educators in China. This is a joint project between NMA and Chinese Association of Rehabilitation Medicine (CARM) with support from the World Federation of Occupational Therapists (WFOT).
- Joyce Mac Kinnon, EdD, PT, is continuing her appointment as visiting professor, Central University of Technology (CUT), Bloemfontein, South Africa.
- Kisha Virgil, a student in the PhD program, was selected to participate as a conference intern for the 21st Annual Art and Science of Health Promotion Conference in Colorado Springs, CO.
- Stuart Warden, PhD, PT, FACSM, was awarded Top Review 2009-2010 for *Bone*, Elsevier Inc.
- Stuart Warden, PhD, PT, FACSM, was appointed as an Associate Editor of the *Journal of Musculoskeletal and Neuronal Interactions* and Editorial Board Member of the journal *Bone*.
- Stuart Warden, PhD, PT, FACSM, received funding from the IUPUI Office of the Vice Chancellor for Research Signature Center Initiative to establish the IU Center for Translational Musculoskeletal Research.