



IUPUI

SCHOOL OF HEALTH  
AND REHABILITATION  
SCIENCESINDIANA UNIVERSITY  
Indianapolis

April - June 2015

## Teaching & Learning

- The **Dietetic Internship Class of 2015** met with Lynn Yu, PhD, RDN, LDN, Director of Nutrition, McDonald's USA. Dr. Yu provided an overview of ongoing nutrition initiatives at McDonalds and discussed her career path and potential career opportunities for dietitians.
- Fifteen students graduated from the **Dietetic Internship Class of 2015** on June 18, 2015. Completion of the Dietetic Internship Program meets the eligibility requirement for students to sit for the Registration Examination for Dietitians.
- In April, the **Dietetic Internship Program** admitted 15 students from a pool of 39 qualified applicants. The admitted Internship Class of 2016 includes graduates of Indiana University, Purdue University, Johnson & Wales, Denver CO, Southern Illinois University, Carbondale, Illinois State University, University of Georgia, Florida International University, University of New Mexico, Appalachian State University, NC, St. John's St. Benedict University, MN, and the University of Illinois.
- The **Dietetic Internship Program Faculty** and graduating **Dietetic Internship Class of 2015** hosted an orientation for the incoming **Dietetic Internship Class of 2016**.
- **Niki Munk, PhD, LMT, Peter Altenburger, PhD, PT** and **Brent Arnold, PhD, ATC, FNATA** co-developed a special topics course: *The Professoriate for Health and Rehabilitation Professionals*. Implementation scheduled for Spring 2016.

## Research, Scholarship & Creative Activity

### Grants

- **Mary Beth Brown, PhD, PT** became a co-mentor for a CTSI TL1 Postdoctoral grant awarded to Dr. Andrea Frump. Post-doctoral stipend and benefits, and supplies are funded for a 12-month period from May 1, 2015 through April 30, 2016.
- **Mary Beth Brown, PhD, PT** is a co-investigator on a recently-awarded IUPUI Signature Center Initiative Grant titled: Center for Cachexia Research Innovation and Therapy, Awarded: \$50,000. Duration: July 1, 2015 to June 30, 2016.
- **Ryan Cardinal, DPT, PT** and **Peter Altenburger, PhD, PT** were awarded \$285,500 from Methodist Health Foundation. Promoting Neurological Rehabilitation of Gait with End-Effector Robotic Technology (REHA Technologies G-EO System).
- **Sarah Eli, PA-C** received a \$10,066 education grant from Ethicon for suture materials.
- **Patricia Scott, PhD, MPH, OT, FAOTA** and **Tracy Dierks, PhD** were awarded an Interprofessional teaching grand rounds \$66,000 grant from Center of Teaching and Learning.

### Publications

- **Avin KG, Hanke TA, Kirk-Sanchez N, McDonough CM, Shubert TE, Hardage J, Hartley G.** Management of falls in community-dwelling older adults: a clinical guidance statement from the academy of geriatric physical therapy of the American Physical Therapy Association. *Physical Therapy* 2015;95(6):815-34.
- **Bayliss AJ, Strunk VA.** Measurement of empathy changes during a physical therapist's education and beyond. *Journal of Physical Therapy Education* 2015;29(2):6-12.
- **Bonsaksen T, Meidert U, Schuman D, Kvarsnes H, Haglund L, Prior S, Forsyth K, Yamada T, Scott PJ.** Does the Role Checklist measure occupational participation? *Open Journal of Occupational Therapy* 2015;3:(14 pages).
- **Brown MB, Chingombe TJ, Zinn AB, Reddy JG, Novack RA, Cooney SA, Fisher AJ, Presson RG, Lahm T, Petrache I.** Novel assessment of hemodynamic kinetics with acute exercise in a rat model of pulmonary arterial hypertension. *Experimental Physiology* 2015;100(6):742-54.
- **Brown T, Crabtree JL, Mu K, Wells J.** The entry-level occupational therapy clinical doctorate: advantages, challenges, and international issues to consider. *Occupational Therapy in Health Care* 2015;29(2):240-51.
- **Cowan SM, Hart HF, Warden SJ, Crossley KM.** Infrapatellar fat pad volume is greater in individuals with patellofemoral joint osteoarthritis and associated with pain. *Rheumatology International* 2015;35(8):1439-42.



## Research, Scholarship & Creative Activity (cont.)

### Publications (cont.)

- Hooker RA, Chitteti BR, Egan PH, Cheng YH, Himes ER, Meijome T, Srour EF, **Fuchs RK**, Kacena MA. Activated leukocyte cell adhesion molecule (ALCAM or CD166) modulates bone mass as well as hematopoiesis. *Journal of Musculoskeletal and Neuronal Interactions* 2015;15(1):83-94.
- Lai X, Price C, Modla S, **Thompson WR**, Caplan J, Kirn-Safran CB, Wang L. The dependences of osteocyte network on bone compartment, age, and disease. *Bone Research* 2015;3:15009 (11 pages).
- **Li, W**. The underlying mechanisms for resveratrol' superinduction effects. *International Journal of Health Sciences* 2015;3(1): 39-59.
- **Li, W**. Practicing orthopedic medicine by physician assistants. *Journal of Exercise, Sports and Orthopedics* 2015;2(1): 1-2.
- **Massie CL**, Kantak SS, Narayanan P, Wittenberg GF. Timing of motor cortical stimulation during planar robotic training differentially impacts neuroplasticity in older adults. *Clinical Neurophysiology* 2015;126(5):1024-32.
- Meijome TE, Hooker RA, Cheng YH, Walker W, Horowitz MC, **Fuchs RK**, Kacena MA. GATA-1 deficiency rescues trabecular but not cortical bone in OPG deficient mice. *Journal of Cellular Physiology* 2015; 230(4): 783-790.
- **Thompson WR**, Keller BV, Davis ML, Dahners LE, Weinhold PS. Low-magnitude, high-frequency vibration fails to accelerate ligament healing but stimulates collagen synthesis in the Achilles tendon. *Orthopedic Journal of Sports Medicine* 2015;3(5):2325967115585783.
- **Thompson WR**, Uzer G, Brobst KE, Yen S, Xie Z, Sen B, Styner M, Rubin J. Osteocyte specific responses to soluble and mechanical stimuli in a stem cell derived culture model. *Scientific Reports*. 2015;5:11049.
- Uzer G, **Thompson WR**, Sen B, Xie Z, Yen SS, Miller S, Bas G, Styner M, Rubin CT, Judex S, Burrige K, Rubin J. Cell mechanosensitivity to extremely low magnitude signals is enabled by a LINCed nucleus. *Stem Cells* 2015;33:2063-76.

### Presentations

- **Peter Altenburger, PhD, PT** provided an invited talk titled, "Impact of Robotic Technologies on movement recovery in neurologically impaired individuals" at Purdue University, April 2015.
- **Tracy A. Dierks, PhD**, Nittoli VC, **Schwipps AR (DPT Student)**, Foster AE. The association between quality of movement and dynamic stability in uninjured high school softball players. Podium presentation: National Athletic Trainers' Association 66th Clinical Symposia & AT Expo; St. Louis, MO, June 2015.
- **Emily Freeland (Student)**, **Sarah Shue (Student)**, **Niki Munk, PhD, LMT**. Massage Therapy Combined with Components of Mirror Therapy is Helpful for a Man with Phantom Limb Pain: Case Report. Poster Presentation for the Life-Health Sciences Internship Program at IUPUI, April 10, 2015: VanNuys Medical Science Building Atrium.
- **M. Terry Loghmani, PT, PhD** provided an invited talk titled, "Inter-professional education and practice as a means to improve clinic and learning outcomes" at Butler University, April 19, 2015 as part of the IUSOC Partner's Semi-Annual Retreat.
- **Crystal Massie, PhD, OTR** presented at the OT Summit of Scholars.
- **Niki Munk, PhD, LMT**, **Sarah Shue (Student)**, **Emily Freeland (Student)**, Ralston R, Boulanger K. Identifying Inconsistencies and Reporting Deficits in TMB Case Reports: A Systematic Review and TMB Adapted Case Report (CARE) Guidelines Audit. Poster Presentation for 2015 IUPUI Research Day, April 17, 2015: IUPUI Campus Center, 4th Floor.
- **Niki Munk, PhD, LMT**, Mannheimer S, Lulgjuraj M, Piotrowski J. Novel prototype devise developed which combines massage therapy with components of mirror therapy to address phantom limb pain in lower-limb amputees. Poster session for the 34th Annual American Pain Society Scientific Meeting, May 13-16, 2015, Palm Springs, CA.
- **Tim Scully, MS**, Rusnak C. Career Planning competencies for Academic Advisors. EDGE Conference on Integrated Career and Academic Planning, May 28, 2015, Indianapolis, IN.
- **William Thompson, DPT, PhD** provided an invited talk titled, "Development and Structure of Connective Tissues" at the University of Delaware, June 2015.

### Poster Sessions

- **Mary Beth Brown, PhD, PT**. Exercise Training at Mild Relative Exercise Intensity Does Not Attenuate Disease Progression in a Rat Model of Severe Pulmonary Arterial Hypertension. American College of Sports Medicine's Annual Meeting, San Diego, May 2015.
- Chingombe T, **Mary Beth Brown, PhD, PT**. Effect of Exercise on Right Ventricle Inflammation in a Rat Model of Severe Monocrotaline-Induced Pulmonary Arterial Hypertension. IUPUI Research Day, April 2015.



## Research, Scholarship & Creative Activity (cont.)

### Poster Sessions (cont.)

- Dave P, **Mary Beth Brown, PhD, PT**. Cardiac and Skeletal Muscle Lipotoxicity in a Rat Model of Pulmonary Arterial Hypertension. IUPUI Research Day, April 2015.
- **Rachel Handt (DPT Student), M. Terry Loghmani, PT, PhD**. The emerging field of regenerative rehabilitation: what's the evidence at the 1st Annual Indiana Regenerative Medicine Symposium, Indianapolis IN, May 19, 2015.
- **C.J. Lui, PhD, OTR** participated in the SOTA poster presentations.
- **Sharon Pape, MS, OTR**, Bertram J, Essink K, Grove H, **Sarah Koning (OT Student)**, and **Linsey Yoh (OT Student)**. Education Opportunities in Primary Care - Applied Learning for Tomorrows Practice. Poster Presentation. American Occupational Therapy Association Annual Conference, Nashville, TN, April 18, 2015.
- **Sharon Pape, MS, OTR, M. Terry Loghmani, PT, PhD, Kevin Pritchard (OT Student), Lindsey Yoh (OT Student), Sarah Crusier (DPT Student), and Rachel Hidde (DPT Student)**. "What's the Difference Between Occupational Therapy and Physical Therapy?" How a Student-Led Inter-Professional Outreach Clinic Address This Question. Poster Presentation. American Occupational Therapy Association, Annual Conference, Nashville, TN, April 16, 2015.
- Pittman A, **Mary Beth Brown, PhD, PT**. "Effects of Aerobic Exercise Training on Diaphragm Muscle Metabolism in a Rat Model of Pulmonary Arterial Hypertension.," at the National Conference on Undergraduate Research (NCUR) 2015, Eastern Washington University, April 2015.
- **Kevin Pritchard (OT Student)** and **Michael Justiss, PhD, OTR** participated in AOTA poster presentation.
- Talley M, Novack R, **Mary Beth Brown, PhD, PT**. Investigating Skeletal Muscle Metabolic Adaptations Underlying Aerobic Fitness Gains Following High Intensity Interval Training in a Rat Model of Pulmonary Arterial Hypertension. IUPUI Research Day, April 2015.
- Troutman A, **Mary Beth Brown, PhD, PT**. The Effect of Exercise Training on Skeletal Muscle Fiber Size in a Rat Model of Hypoxic Pulmonary Hypertension. IUPUI, LHSI Research Symposium, April 2015.

### Video/Audio Podcasts, Blogs, and Other Contributions

- IU Student Outreach Clinic Video Production titled "PROMOTING INTERPROFESSIONAL EDUCATION & PRACTICE: Occupational Therapy & Physical Therapy Collaboration at Indiana University Student Outreach Clinic." The writing and filming was a multi-disciplinary collaborative effort by the following: Student Director & Film Editor – Maiyasa Issa – Communications; Student Editors & Actors – **Hannah Enoch (DPT Student), Melissa McGill (OT Student), Jason Pociask (DPT Student), Lauren McGill (OT Student)**; Faculty Editors & Advisor – **M. Terry Loghmani, PT, PhD** and **Sharon Pape, MS, OTR**.
- **Munk N**, Reynolds M, Werner R. (Narrators). (2015, June 8 @ 10:12AM). Research Perch 20: Massage Impact on Pain in Opioid-dependent Patients in Substance Use Treatment. [Audio & Video podcast]. Available at: <http://info.massagetherapyfoundation.org/blog/bid/363785/Massage-Impact-on-Pain-in-Opioid-dependent-Patients-in-Substance-Use-Treatment-Research-Perch>.
- **Munk N**, Reynolds M, Werner R. (Narrators). (2015, May 13 @ 9:15AM). Research Perch 19: Negotiating Consent: Exploring Ethical Issues when Therapeutic Massage Bodywork Practitioners Are Trained in Multiple Therapies [Audio & Video podcast]. Available at: <http://info.massagetherapyfoundation.org/blog/bid/362110/Negotiating-Consent-Exploring-Ethical-Issues-when-Therapeutic-Massage-Bodywork-Practitioners-Are-Trained-in-Multiple-Therapies-Research-Perch>.
- **Munk N**, Reynolds M, Werner R. (Narrators). (2015, April 29 @ 9:13AM). Research Perch 18: The Effects of Massage Therapy on Pain Management in the Acute Care Setting [Audio & Video podcast]. Available at: <http://info.massagetherapyfoundation.org/blog/bid/362109/The-Effects-of-Massage-Therapy-on-Pain-Management-in-the-Acute-Care-Setting-Research-Perch>.
- **Munk N**, Reynolds M, Werner R. (Narrators). (2015, April 15 @ 9:11AM). Research Perch 17: Case Report: The Effects of Massage Therapy on a Woman with Thoracic Outlet Syndrome [Audio & Video podcast]. Available at: <http://info.massagetherapyfoundation.org/blog/bid/362111/Case-Report-The-Effects-of-Massage-Therapy-on-a-Woman-with-Thoracic-Outlet-Syndrome-Research-Perch>.
- **Munk N**, Reynolds M, Werner R. (Narrators). (2015, April 1 @ 9:09AM). Research Perch 16: Zen Shiatsu: A Longitudinal Case Study Measuring Stress Reduction in a Child with Autism Spectrum Disorder [Audio & Video podcast]. Available at: <http://info.massagetherapyfoundation.org/blog/bid/362112/Zen-Shiatsu-A-Longitudinal-Case-Study-Measuring-Stress-Reduction-in-a-Child-with-Autism-Spectrum-Disorder-Research-Perch>.



### Civic Engagement

- Two Nutrition and Dietetics graduate students, **Maria Ruberg Browning** and **Bekah Sommer** successfully defended their master's degree projects. The title of Maria's project is "Body Composition and Lung Transplants Outcomes: A Retrospective Study." The title of Bekah's project is "Food Pantry Screening Tool: an effective survey to gauge nutrition risk among food pantry patrons."
- Dietetic interns, **Lisa Bunn**, **Kaylee McClanahan**, **Shelby Johnson**, and **Sarah Sweaney** participated in Career Day at Pike Township High School.
- **Wei Li, MD, PhD** was a judge for Carmel High School Medical Presentation Panel, March 12, 2015.

### External Awards and Appointments

- **Peter Altenburger, PhD, PT** received the 2014 IU Trustees Teaching Award.
- **Miriam Barr** received the SHRS 2014 Staff Recognition Award.
- **Sara Blackburn, DSc, RD** was named Outstanding Dietitian for Indiana by the Indiana Academy of Nutrition and Dietetics.
- **Mary Beth Brown, PhD, PT** was appointed to the 2016 Program Committee for the American Thoracic Society (ATS) Assembly on Pulmonary Rehabilitation.
- **Lisa Bunn (Dietetic Intern)** won the Case Presentation contest sponsored by the Indiana Society for Parenteral and Enteral Nutrition.
- **Tracy Dierks, PhD** was reappointed as member of the St. Vincent Sports Performance – Science Team.
- **Michael Justiss, PhD, OTR** received the 2014 SHRS Sustained Excellence in Service Award.
- **Michael Justiss, PhD, OTR** was invited to be a committee member for the Accreditation of Rehabilitation and Assistive Technology programs through RESNA June 10, 2015, in Denver, Colorado.
- **Wei Li, MD, PhD** was awarded an Alzheimer's Association International Conference Travel Fellowship.
- **M. Terry Loghmani, PT, PhD** and **Sharon Pape, MS, OTR** were invited by Andrea Pfiefler, EdD, PT, Assistant Dean and Director of the IUPUI Center for Interprofessional Health Education and Practice, to serve as a faculty leaders on the IU SOC Nexus Project. University Clinical Affairs, comprised of Deans of Health Sciences across IU, has identified IU SOC as one of the three IU Nexus Network projects. The Nexus Network awards grants to fund projects that enable researchers to build meaningful inter-disciplinary research collaboration networks.
- **M. Terry Loghmani, PT, PhD** received the 2014 SHRS Emerging Excellence in Service Award.
- **Kristine Miller, PhD, PT** received the 2014 SHRS Emerging Excellence in Service Award.
- **Holly Moran (Dietetic Intern)** was named Outstanding Dietetic Intern for Indiana by the Indiana Academy of Nutrition and Dietetics.
- **Niki Munk, PhD, LMT** received the 2014 SHRS Emerging Excellence in Teaching Award.
- **Sharon Pape, MS, OTR** was invited to join the IU Health Home Care Advisory Council.
- **William Thompson, PhD, PT** was awarded the Alice L. Lee Young Investigator Award, Orthopaedic Research Society 45<sup>th</sup> International Sun Valley 2015 Workshop in Sun Valley, Idaho.