

IMPACTS



THE MAGAZINE OF
THE IU SCHOOL OF HEALTH AND REHABILITATION SCIENCES









IU SCHOOL OF HEALTH AND REHABILITATION SCIENCES

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IMPACTS

THE MAGAZINE OF THE **IU SCHOOL OF HEALTH AND REHABILITATION SCIENCES**
Health Sciences • Nutrition and Dietetics • Occupational Therapy • Physical Therapy • Physician Assistant

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Editor/Designer

Brenda Lawless

Contributors

Augustine Agho, PhD; Christine Baldwin; Mary Beth Brown, PT, PhD; Eric Burrous; Sara Cruser, SPT; Michael Justiss, PhD, OTR; Brenda Lawless; Chiung-ju Liu, PhD, OTR; Joyce Mac Kinnon, EdD, PT; Kristine Miller, PT, PhD; Niki Munk, PhD; Sharon Pape, MS, OTR; Richard Schneider; Stuart Warden, PhD, PT



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SCIENCES

INDIANA UNIVERSITY

Indianapolis

Greetings from the Dean



Dear Friends,

As one of the health sciences schools at Indiana University, the School of Health and Rehabilitation Sciences continues to play a vital role in the creation of new knowledge and the education of proficient graduates who use their skills and expertise to provide competent health care. Our students enjoy the benefits of having engaged faculty and staff who demonstrate a strong commitment to teaching and scholarship through the excellence of their daily work.

In the 2013 issue of IMPACTS, I shared with you that the school had started to implement its revised five-year strategic plan, a document developed and aligned with the IUPUI strategic plan and the Principles of Excellence outlined by President Michael McRobbie. This past year we made significant progress in the seven strategic directions identified in the school's strategic plan. We admitted our second class of 44 physician assistant students. Graduates of our programs continue to score above national averages on their national certification examinations. The Indiana University Board of Trustees reviewed and approved the school's request to offer the Bachelor of Science in Health Sciences (BSHS) Online, Master of Science in Health Science (MSHS) Online, and Post-Professional Doctorate in Occupational Therapy (OTD) programs. Implementation of these programs will have a strong positive impact on student enrollment and overall visibility of the school.

Our BSHS program has experienced a rapid growth in student enrollment. Starting with a modest enrollment of 17 in fall 2010, student enrollment in the program now stands at 250. Student excellence was also a dominant feature this year in this program, as Jordan Hanaway, a junior in the BSHS program was named an IUPUI Top 100 student; and Elanor Bolles, a 2014 graduate of the BSHS program received the Chancellor's Scholar Award. In addition, Jennifer Smedley, a 2014 graduate of the program, was admitted to the second class of the Physician Assistant program.

Featured in this issue of IMPACTS is a special story about the rich tradition and historical roots of our school. The school, as constituted today, is relatively young. However, as illustrated in the story on page 4, the foundations of the programs housed in the school were laid in the early and mid-1900s. We are indebted to Dr. Mark Sothmann, Founding Dean of the SHRS, Dr. Patricia Laurencelle, Founding Director of the OT program, Professor Martha Lute Troutt, Founding Director of the ND program, Professor Frances Ekstam, Founding Director of the PT program, and the founding faculty and staff of our programs for their vision and for building the solid foundation upon which we have built strong and reputable academic programs. Also featured in the magazine is a compendium of interdisciplinary research collaborations and scholarly achievements of faculty, staff and students.

Our ability to transform and grow as a school is possible thanks to the work ethic and dedication of faculty and staff. We have a lot of work to do over the next five years, but I am confident that successful execution of the initiatives outlined in our plan will continue to make you proud to be a graduate and sustainer of our school.

Thank you again for your commitment and continued support of our school! Without you - our alumni, donors, faculty, staff, and friends - we would not be able to maintain our position as a source of innovation, talent and knowledge creation at local, national and international levels. I hope you will take the time to read the articles in the magazine and share your thoughts. Our magazine is available online at our website <http://shrs.iupui.edu/about/impacts.html>. We also hope you will stay current on the activities of faculty and students through our Facebook page - <https://www.facebook.com/iupuiSHRS>.

Best Regards,

A handwritten signature in black ink that reads "Augustine O. Agho". The signature is written in a cursive style.

Augustine O. Agho, PhD, Dean

A Pioneer Profile and Our Programs' Past

By Brenda Lawless



Mrs. Olevia Cascadden (r) poses with longtime family friend and IU PT alumna, Jean Harbron(l).

It is said that the key to truly understanding yourself is to understand your history. We each have a personal story that has shaped and defined who we are today, and it is as true for institutions as it is for individuals. While the School of Health and Rehabilitation Sciences is young as a cohesive unit, our roots stretch back to the turn of the previous century. The IU Nutrition and Dietetics program was founded in 1918 with the goal of studying and improving the quality of life for people through nutrition and improved well-being. The foundations of the IU Physical

To the right, the IU Medical Center as it looked in 1940 with Riley Children's Hospital at the top center. In the center of the photo from left to right are the Ball Residence, Coleman Hospital, Fesler Hall, Long Hospital, and Emerson Hall.

Therapy and Occupational Therapy programs were laid during the 1940s and 1950s by veterans of the polio epidemic and World War II with the goal of passing on the lessons learned on the front lines of two very different, but no less impactful, battlefields. As we look back on nearly 100 years of history within our programs, we pay homage to that generation of pioneers who started us on the path of knowledge, research, and improving the lives of those we touch.

The first half of the 20th century was a turbulent period for the U.S. Not only was the nation thrust into two global wars, but the influx of a massive polio outbreak became the plague of the time. In many ways, one could successfully argue that World Wars I, II, and the polio epidemic played a strong role in the building of the physical therapy and occupational therapy professions, shaping them into what they are today. Indiana was no different, and the national call to action led many Hoosiers to either join the Army as therapists or head back to school to learn the professions.

One sterling example of this response is Mrs. Olevia Cascadden. Born in Columbus, Indiana, during an snowstorm in 1915, Olevia was raised by a family that valued education, etiquette, and helping society through science. Her father, a graduate of the IU Botany program, was a physics teacher who stressed



the importance of reading every day. Olevia quickly grew to love science and was determined to be a biology teacher, which she did for over five years up through the early years of World War II. During that time, a desperate need for physical therapists emerged. Because of her strong background in science, Olevia was offered a rare spot at Harvard University to study physical therapy. But it was not an easy road. Harvard was traditionally a male institution, and women were not a welcome addition. The female PT students were escorted across campus at all times, forced to sit in the back of the room or in broom closets, and could only work in cadaver labs during the summer because the male students were not on campus. With no air conditioning or treatment facilities, it was hot, smelly and full of bugs. Olevia also had the unique opportunities to train at the Massachusetts General Burn Unit in Boston and to learn the innovative Sister Kinney Method, which was a groundbreaking therapy using heat and massage to keep muscles limber and



Top and bottom photos: Physical Therapist Olevia Cascadden works with polio patients, as reported in the *Muncie Evening Press*, November 9, 1949 edition.



pliable (a therapy that proved very effective with polio patients). After several months within the program, the nation issued another call for therapists and half of her class left for the war. Olevia stayed to complete the program and returned to Indiana in 1945 to begin her efforts on the local war front against an invisible enemy.

At that time, Indiana was engulfed in the polio epidemic. Polio is a highly contagious viral infection that causes paralysis of the extremities, breathing problems and potentially death. The majority of patients treated by occupational and physical therapists during that time were victims of polio. Olevia began her physical therapy career in the hydrotherapy pool at James Whitcomb Riley Children's Hospital under the supervision of Winifred Kahmann, the Director of Occupational and Physiotherapy at Riley. Olevia worked tirelessly beside other therapists like Charlotte Anderson, the beloved hydrotherapy pool supervisor, who in Olevia's words "always had something extra for her patients." They spent a lot of their time muscle testing and determining the therapy plan. The teams which consisted of therapists, nurses, doctors, aides and the brace maker made a true difference in their patients' lives.

It was at Riley where Olevia met Frances (Fran) Ekstam, a fellow novice physical therapist who Olevia described as an amazing therapist who had a special talent for working with paraplegic patients. Olevia remarked that Fran was a very determined therapist, and "if there was anything that needed to be done, it would be completed with no question." Her relationship with Fran was close and long lasting, and Olevia remembered fondly that as the founding director of the IU PT program, Fran knew the names of every student and kept close tabs on their success. In one warmhearted memory, Olevia recounted a conversation with Fran about a young PT student who was also a close family friend — Miss Jean Phillips. Jean was described as being extremely smart — almost too smart for a physical therapist at the time, which Fran felt may be a problem. But this young woman persevered and graduated from the IU Physical Therapy Class of 1964.

It is the dedication, service and unwavering determination of these pioneers that formed the foundations of our educational programs and is still reflected in the spirit of every professional that we train. Through the unforgiving warfront of polio, the IU occupational therapy and physical therapy programs found their footing in Indiana. The School of Health and Rehabilitation Sciences salutes the pioneers of our professions for clearing the path to where we are today.

SHRS Research Conference Update

By Brenda Lawless

The 2013 SHRS Interdisciplinary Research Conference held on October 5 was a fantastic success, with speakers covering various topics from direct access in physical therapy to the translation of research in clinical practice. Students were also able to display poster presentations on their research and meet with

**IU School of Health and Rehabilitation Sciences
Interdisciplinary Research Conference**



alumni, recruiters and vendors. The SHRS Alumni Association also took this opportunity to present the 2013 Distinguished Alumni Award (see page 22). Plans for the 2014 conference are well under way. The event, scheduled for September 26, will feature interdisciplinary topics that cover mobility and driving, serving homeless populations, electronic medical records, as well as student and faculty research presentations and various health care vendors.



The School is grateful for the sponsorship and support provided by the IU Alumni Association and SHRS Alumni Board in the organization of this event.

For more information, contact Sharon Holland at the Alumni Association, at shollan@iupui.edu.

Workshop Puts Spotlight on OT Innovation, Research and Collaboration

By Brenda Lawless

The second annual Cel Hamant Lecture Series, held this spring, featured a collaborative workshop presented by Nancy Lamport, MS, OTR; Margaret Coffee, MA, COTA, ROH and Gayle Hersch, PhD, OTR. **Pathways to Collaboration: Creating and Maintaining a Professional Partnership** focused on their years of research, collaboration, and practice within the OT profession.

The discussion of finding effective ways for OTs and OTAs to collaborate in multidisciplinary efforts made a distinct impression on the group of practitioners, alumni, faculty and students. The presenters guided the audience through the various types of collaborative partnerships and discussed the importance of having trustworthy

colleagues with whom one feels comfortable to brainstorm. "It provides a firm background on which to build new ideas and to review old ones. There is always someone you can comfortably trust when you need to explore a budding idea as well as to share a personal one, be it good news or bad," remarked Gayle Hersch.

After the lecture, guests enjoyed a lunch with OT faculty, staff and school administrators where they were updated on the activities in the Department of Occupational Therapy. They then participated in the 8th Annual IU Department of Occupational Therapy's Student Research Day which showcased OT student-mentored research.

The Cel Hamant Lecture Series is part of the Department's Research and Faculty Development Initiative led by Dr. and Mrs. Thomas F. Fisher. This series features distinguished and prominent OTs discussing topics related to OT education, research and/or practice. It is named in honor of Celestine Hamant, Associate Professor Emerita, who was the program director of the OT undergraduate program from 1984 to 2004. We thank OT alumni and friends who have honored Ms. Hamant with their gifts to the fund.



From left to right, Angela Palicki, OT, Jackie Chamberlain, OT '65 and Sherry Benner, OT '74 take a chance to chat during a break period.

2013 Faculty and Staff Awards



CHRISTINE BALDWIN – 2013 STAFF RECOGNITION AWARD

Ms. Christine Baldwin, Director of Development in the Office of the Dean, was presented with the 2013 Staff Recognition Award at the school's annual faculty and staff luncheon on May 16. The award recognizes a staff member who exhibits a high level of commitment and dedication to the strategic goals of the school, willingness to provide excellent service beyond his/her scope of responsibilities, commitment to collaboration and teamwork, and positive interaction with faculty, staff, students and alumni. Since joining the school in 2011, Christine has worked with corporations, foundations and individual donors to shepherd 16 gift agreements. She is currently enrolled in the Executive Masters of Philanthropic Studies program at the IU Lilly School of Philanthropy.



MARY BETH BROWN – 2013 EMERGING EXCELLENCE IN RESEARCH AND SCHOLARSHIP AWARD

Dr. Mary Beth Brown, assistant professor with the Department of Physical Therapy, was awarded the 2013 Emerging Excellence in Research and Scholarship Award in recognition of her remarkable contributions to the school's research agenda, and innovative research methods. While her primary investigative focus targets the use of exercise in the treatment of hypertension, work during her post-doctoral training has led to the development of intravital microscopy for pulmonary research. Beth has been instrumental in developing collaborative networks across campus as she continues to develop this research. Her growing research agenda promises to garner attention from the National Institutes of Health as she begins to publish her work.



CHIUNG-JU LIU – 2013 EMERGING EXCELLENCE IN RESEARCH AND SCHOLARSHIP AWARD

Dr. Chiung-ju Liu, assistant professor with the Department of Occupational Therapy, received the 2013 Emerging Excellence in Research and Scholarship Award in recognition of her outstanding contributions to the school's expanding research initiatives. CJ's primary investigative focus involves various areas of the geriatric population, such as the improvements of home daily activities for low vision elderly, preventing Activities of Daily Living (ADL) dependency with activity training, and the 3-step workout for life to improve functionality. Her research goal is to find effective ways to improve the daily lives of geriatric patients.



SHARON PAPE – 2013 SHRS EXCELLENCE IN SERVICE AWARD

Professor Sharon Pape, lecturer and academic fieldwork coordinator in the Department of Occupational Therapy, received the 2013 SHRS Excellence in Service Award in recognition of her outstanding contributions to community engagement, student mentoring and her commitment to the advancement of the occupational therapy profession. Sharon was unwavering in the task of establishing the OT Department as a practicing partner of the IU Student Outreach Clinic. She has also continued in her roles of service as co-advisor for the IUPUI OT/PT Club, faculty advisor for the Student Occupational Therapy Association (SOTA) at IU and was a participant on the SHRS strategic planning committee.



PATRICIA J. SCOTT – 2013 INDIANA UNIVERSITY TRUSTEES TEACHING AWARD

Dr. Patricia Scott, associate professor in the Department of Occupational Therapy, was awarded the 2013 Indiana University Trustees Teaching Award in recognition of her dedication in engaging her students in the learning process and stressing the importance of critical thinking, research and evidence-based practice. Her national reputation as a disciplined researcher and educator is complimented by her relentless efforts to engage her students in her research initiatives. Under her mentorship this year alone, 10 OT students presented their research at national conferences and published their findings in international journals.

SHRS New Faculty Highlights



KEITH AVIN

Dr. Keith Avin joins the SHRS as assistant professor in the Department of Physical Therapy and is another example of IU alumni coming back to the program. He graduated with an undergraduate degree in kinesiology from the University of Illinois at Urbana-Champaign in 2001; a masters degree in kinesiology from the University of Illinois at Urbana-Champaign in 2003; a doctorate in physical therapy at IU in 2006 and a Ph.D. in physical rehabilitation science from the University of Iowa in 2012. Keith completed a post-doctoral fellowship with the Division of Geriatric Medicine at the University of Pittsburgh. His research interest focuses on skeletal muscle loss in aging and chronic kidney disease.



CRYSTAL MASSIE

Dr. Crystal Massie joins the SHRS in August 2014 as assistant professor in the Department of Occupational Therapy. She graduated with a undergraduate degree in exercise science from the University of Lethbridge in 2005; a master's degree in occupational therapy from Colorado State University in 2008 and a Ph.D. in human bioenergetics from Colorado State University in 2012. Dr. Massie completed a two year post-doctoral fellowship at the University of Maryland School of Medicine. Her focus is to improve functional ability for survivors of stroke. She is engaged in clinical interventions for stroke survivors and will bring her funded American Heart Association Clinical Population Research grant titled "Functional Motor Cortex stimulation to repair damaged movement representations after stroke" to IU.



KRISTINE MILLER

Dr. Kristine Miller joined the SHRS in 2013 as assistant professor in the Department of Physical Therapy. She graduated with a undergraduate degree in physical therapy at IU in 1989; a master's degree in therapeutic outcomes research in 2008 and a Ph.D. at IU in 2013. She has been an adjunct faculty member with the school since 2006 and has been an active researcher in several joint investigations with researchers from Roudebush VAMC. Her research interest focuses on the use of exercise therapies, such as yoga, to improve function after brain injury.



ROSALYN ROSAS

Professor Rosalyn Rosas joined the SHRS in November 2013 as assistant professor with the Master's in Physician Assistant Studies program. She received a undergraduate degree in biology from the University of the Philippines in 1997; an accelerated bachelor of science in nursing from Loyola University in 2003 and a master's of medical science physician assistant from St. Francis University in 2007. Her areas of specialty are vascular and thoracic surgery.



WILLIAM THOMPSON

Dr. William Thompson joins the SHRS in September 2014 as assistant professor in the Department of Physical Therapy. He graduated with a undergraduate degree in biochemistry from Lee University in 2004; a doctorate in physical therapy from the University of Delaware in 2007 and a Ph.D. in molecular biomechanics from the University of Delaware in 2010. William completed post-doctoral fellowships with University of Delaware and University of North Carolina, researching responses of bone stem cells to mechanical stimuli.

SHRS New Staff Highlights



DELANA GIFFORD

Mrs. Delana Gifford joined the SHRS in August 2013 as the assistant to the chair in the Department of Health Sciences. She began working at IUPUI in 2002 with the Kelley School of Business and also worked with the School of Engineering and Technology. Delana is currently working on her bachelor's degree in general studies at IUPUI and plans to graduate in May 2017. In her spare time, she enjoys reading, spending time with family, making jewelry and attending GenCon every year.



MONICA HARMON

Mrs. Monica Harmon originally joined the SHRS in 2011 as the clinical program assistant for the Department of Occupational Therapy. In December 2013, she moved into the position of assistant to the chair for the OT department. She received her medical assisting diploma in 2008 and her associate's degree in business administration from Indiana Institute of Technology in 2013. Monica continues to work on her bachelor's degree which she hopes to complete in December 2014. In her spare time, she enjoys biking, cooking, long walks in the park, swimming and bonfires.



DEANNA HART

Mrs. Deanna Hart joined the SHRS in May 2014 as the Director of Student Enrollment Services. She came from the Kelley School of Business where she was the assistant director for admissions for the evening MBA program. Deanna has a bachelor's degree in business management and a master's degree in adult education from IUPUI. In her spare time, she enjoys spending time with her family, traveling, and hiking.



BRENDA LAWLESS

Mrs. Brenda Lawless moved into the role of Director of Marketing, Communications and Special Events for the SHRS in January 2014. She originally joined the SHRS in 2007 as assistant to the chair for the Department of Physical Therapy. She earned her bachelor's degree in history from IUPUI in 2006. In her spare time, she enjoys spending time with her family, exercising, hiking, cooking and learning how to use her new iPad.



KAREN MCGREGOR

Mrs. Karen McGregor joined the SHRS in March 2014 as clinical program assistant for the Department of Occupational Therapy. She came from the University of Indianapolis where she was the fieldwork assistant for the School of Occupational Therapy. She is currently working on her bachelor's degree in liberal studies with a minor in psychology at the University of Indianapolis, with a graduation date of May 2015. In her spare time, she enjoys reading, writing poems - one of which was published, antiquing, volunteering at animal shelters and being physically active.

Advancing Therapy Options Through Robotic Treatment & Research

By Richard Schneider

IU Department of Physical Therapy faculty and students are researching how best to use advanced rehabilitation robots to treat patients with traumatic brain injuries, stroke, cerebral palsy and other neuro-based impairments. Their work focuses on five robots and three pieces of innovative technology in the Advanced Neurorehabilitation Research Laboratory.

This lab is a collaborative effort between the Department of Physical Therapy and IU Health Rehabilitation Services, which staffs the facility with physical, occupational and speech therapists. It is made possible by contributions from Robots to the Rescue, Riley Children's Hospital Foundation, Methodist Health Foundation, and the United Cerebral Palsy Association of Greater Indiana. "This lab is a leader in the Midwest relative to implementing this type of technology in the rehabilitation world, so much so that it will host a workshop next year on advanced technology and how it is impacting neurological recovery," said Dr. Peter Altenburger, co-chair of the physical therapy department.

"PT faculty, students and IU Health therapists work together to determine best ways to use the technology to assist patients," said Ryan Cardinal, Program Manager for Neurorehabilitation and Robotics.



A young patient with cerebral palsy works with an IU DPT student on the Lokomat in an effort to improve his walking ability.

Among the questions being investigated are how much treatment is the right amount, how often should treatment on a robotic device be provided, is more treatment better and is there a limit after which there is no benefit, he said. Many of the questions stem from the abilities of a therapist to physically help a patient make a particular movement, compared to the ability of a robot. Therapists using a traditional approach might be able to help a patient take 100 steps during an hour-long session. But a robot is capable of helping that same patient take up to 1,000 steps in an hour.

"Therapists are creating outcomes, which drives new questions about use of the robots. Faculty and students research the answers to those questions."

There is no confusing the rehabilitation robots with Star Wars' R2D2. The devices are considered robotic because a computer system drives an end-effector or exoskeleton and have their own internal engine or power for movement. The robots are manipulated by a therapist who defines the movement that they create. The Lokomat, one of the robots at the lab, assists patients with walking. The frame of the \$400,000 machine moves the legs in a natural walking pattern, with a therapist using a computer to control the pace of walking and measuring the body's response to the movement. "It replicates what walking feels like, is more consistent, lasts longer, and enables the patient to take far more steps than if I was crawling on the floor behind the patient, using my hands to help the patient move his legs," Altenburger said. Other robots at the lab include one that focuses on the shoulder-elbow, another on the wrist and a third on the full upper extremity. A fifth robotic device focuses on the ankle.

"The technology lends itself to repetition training, building on motor learning and neuroplasticity," Cardinal said. "Our equipment is geared toward assisting someone, like a patient who has experienced a stroke, retrain pathways in the brain to regain a walking pattern. Research shows that lots of repetition and practice, practicing the same thing over and over again, enhances the ability to do that activity."

Faculty Research Suggests Exercise During Youth Provides Lifelong Benefit

By Richard Schneider, Stuart Warden, PT, PhD, and Brenda Lawless

Bone is a living tissue that gets stronger in response to the mechanical forces associated with exercise. Exercise has the greatest benefit on bone strength during growth; but do the benefits of exercise during youth persist with aging, when bones are at greater risk of breaking? This question was addressed in a series of studies conducted by Stuart Warden, associate professor, associate dean for research and director of the Center for Translational Musculoskeletal Research.

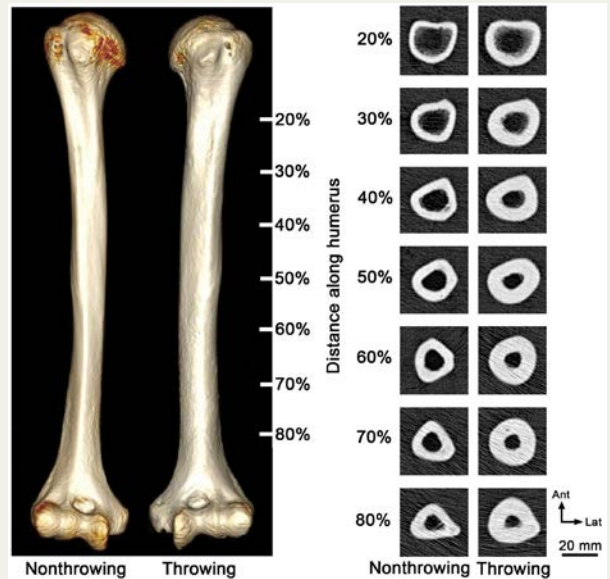
Comparing differences between the throwing and non-throwing arms of Major League Baseball (MLB) players at different stages of their careers to differences measured in non-baseball players, the data showed that half of the bone size and one-third of the bone strength benefits of exercise performed during youth were maintained throughout life.

As bone loss during aging primarily occurs on the inside rather than outside of a bone, Dr. Warden noted that the bigger, stronger bone created by exercise during youth has a means of lasting lifelong.

“This is an impressive level of maintenance, particularly considering that the baseball players had not thrown, or in other words, exercised, in over 50 years,” Dr. Warden said. In contrast to the maintenance of the bone size and strength benefits, he found that the amount of new bone added through exercise during youth was lost during aging. This observation came as no surprise to the investigators.

“While we have historically been encouraged to exercise during youth to put ‘more bone in the bank’ to lose during aging,” Dr. Warden said, “it is not energy efficient for the skeleton to maintain its mass in excess of its needs.” How can exercise during youth have a lifelong benefit on bone strength, but not mass? He indicated this is due to exercise enhancing bone size. Like any load-bearing structure, bones can be strengthened not only by adding more material but by adding the new material where it is needed most.

“Exercise during youth adds extra layers to the outer surface of a bone to essentially make the bone bigger,” he said. “This gives you more ‘bang for the buck,’ as the addition of a small amount of new material to the outside of a bone results in a disproportionate increase in bone strength relative to the gain in mass.”



Bone scans demonstrate the differences in throwing versus non-throwing arms in Major League Baseball players.

They also found that exercise later in life benefits the aging skeleton. This was demonstrated in the testing of retired MLB players who either completely ceased throwing after their professional career or continued to throw for an additional 20 years after their professional career. Continuing to throw during aging did not make the bones bigger, but it did prevent the loss of bone material from the inside.

“The net result was the maintenance of the strength benefit of exercise completed during youth, with baseball players who continued to throw during aging maintaining over 50 percent of the bone strength benefit of exercise performed in youth,” Dr. Warden said.

He encourages children to exercise at least 60 minutes daily, with at least a third of that time consisting of weight-bearing activities that expose the skeleton to impact forces in multiple directions such as running, jump rope, basketball, volleyball, tennis, soccer and hopscotch. Similarly, the data indicate that exercise should be continued as we age to maintain as much of the benefits of exercise generated during youth, as well as to maintain muscle strength and balance, and reduce fall risk.

This work was supported by the National Institute of Arthritis and Musculoskeletal and Skin Diseases (AR057740), part of the National Institutes of Health. The content of the study is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.



“3-Step Workout for Life” Program Improving Options for Elderly Populations

By Chiung-ju Liu, PhD, OTR and Richard Schneider

There truly is no place like home. Just ask the nearly 90 percent of older adults who wish to live in their current home for as long as they can. But this wish may be compromised if they cannot manage daily needs like preparing a meal independently.

A decline in muscle strength due to age and lifestyle is usually what undermines the ability to live independently. Having to depend on others to complete self-care tasks places these individuals at risk for placement in a nursing home, said Dr. Chiung-ju Liu, assistant professor with the OT department.

Dr. Liu specifically designed a 10-week “3-Step Workout for Life” exercise program to help older adults regain their muscle strength and maintain independence. She and Dr. Dan Clark, a senior scientist from the IU Center for Aging Research, are testing the feasibility of the program with funding from the IU Roybal Center for Translational Research and the Retirement Research Foundation.

“Aging and the loss of muscle strength is a gradual process and older adults may not realize that they are losing strength. They give up little by little — first making fewer trips for grocery shopping, cooking less often, and taking fewer showers. The phrase ‘*use it or lose it*’ applies here. Soon they are far down the path to



An OT student leads patients through the exercise program.

disablement,” remarked Dr. Liu.

Just as physicians prescribe medications to combat diseases, occupational therapists use everyday activities as a therapeutic medium to help people with physical, mental, or developmental conditions live independently.

“This is a 10-week therapeutic workout program to improve and maintain older adults’ independence at home. In other words, my research is trying to decrease older adults’ chances of developing disabling conditions and needing rehabilitation therapy,” Dr. Liu explained.

Driving Research to Enhance Mobility

By Michael D. Justiss, PhD, OTR

The Driving Safety and Rehabilitation Research Laboratory (DSRRL) is focused on improving social participation through driving and community mobility, as well as supporting independent living through Gerontechnology research. In the United States, the ability to travel without depending on others has become synonymous with independence, autonomy, dignity and self-esteem. The older adult population is the fastest growing cohort and many will outlive their ability to drive due to declining physical, sensory, and cognitive skills. Some policy experts believe this may pose a public health crisis.



Current research efforts are focused on assessments to identify deficits in driving-related skills and driving performance; rehabilitation and intervention strategies to maintain driving independence; and use of transportation alternatives when driving is no longer a safe option in order to maintain

A study subject moves through several maneuvers designed specifically to test cognitive and sensory assessments.

independent mobility and participation in society. Gerontechnology research is currently investigating smart-home monitoring and intervention application to promote living in place for individuals with cognitive impairment. The DSRRL is equipped with driving and activity simulators as well as visual, cognitive and sensory assessment and intervention technologies.

Examining Massage Therapy as a Treatment

By Niki Munk, PhD

As a licensed massage therapist and gerontologist, my research interests involve massage therapy efficacy and effectiveness for chronic pain, mental health and other symptoms across the life span. Ultimately, my goal is to identify and neutralize barriers to massage therapy accessibility for patients in primary and rehabilitative care with evidence-based research and practice-informed evidence. For an example, in the case of amputees, pain is experienced in a limb that is no longer physically reachable inhibiting direct massage to the area in pain. The growing evidence in the literature points to massage efficacy and effectiveness for many pain conditions, but treatments are always applied to the areas of concern. While not well articulated, massage practitioners apply a treatment theory which corresponds with Pluger's Law of Symmetry (essentially that stimulation on one side of the body will cause motor reactions to similar muscles bilaterally) when they work on the opposite and corresponding side of the body in pain first in order to better prepare and start a treatment effect on the actual area of concern. This treatment theory (crossover effect) is used quite a bit in athletic and strength training with supporting evidence in the literature and is the basis for my current efforts to determine the feasibility of addressing phantom limb pain by massaging the opposite, intact limb.

A big area of concern regarding massage therapy is accessibility for those who would benefit from massage; a principal barrier to massage is cost and/or out-of-pocket expense for treatment. This accessibility barrier is perpetuated by the exclusion of coverage for massage therapy in health insurance plans which stems from the lack of evidence base for the massage field in general. This developing research program is poised to cultivate collaborative efforts with primary and rehabilitation clinicians and researchers who wish to integrate and examine evidence-based massage therapy in usual care. Massage therapy is a treatment approach that has been used in and out of orthodox medicine throughout history and is generally accepted as having potential benefit. Understanding the extent to which massage can impact patient function and health is important, and my work is in line with the paradigm shift in medicine to a more integrative approach to health care.

Could Exercise Be a Prescription?

By Mary Beth Brown, PT, PhD

Our lab focus is to evaluate exercise as therapy for patients with pulmonary arterial hypertension (PAH). PAH is a disease of chronically elevated pulmonary pressures that lead to right-sided heart failure and premature death. There is no cure and no effective treatment to date. Exercise is a promising therapy as it is documented to benefit lung and cardiovascular health. But little is known about its immediate or long-term effect on the disease process. We are collecting data to address how different parameters impact physiological responses and outcomes in PAH. Our hope is that the data will determine the appropriate exercise prescription for patients with PAH. This work is funded by the American Heart Association's three-year Scientist Development Grant.

Currently, we are manipulating parameters of exercise in a rat model of PAH to determine how exercise can be optimized for maximum benefit with minimal adverse effects - such as accelerated right heart enlargement. One of our goals is to determine how specific types of exercise may yield improvement in skeletal and cardiac muscle metabolism in PAH, and how it translates to greater tolerance for physical activity. We have also been working to develop a new method of measuring simultaneous pulmonary and systemic pressures in our PAH rodent model using implantable telemetry.

We have recently successfully measured pulmonary pressures during exercise in our PAH rat model which will greatly advance our understanding of exercise impact in this disease.

Our lab is also investigating exercise in a small pilot study of patients with PAH, funded by the American Thoracic Society-Pulmonary Hypertension Association. The aim is to determine if a combination of daily walking plus a blood-pressure-lowering dietary supplement can enhance positive training effects in PAH. We have enrolled five subjects to date and are looking to enroll up to seven additional patients. IU School of Medicine pulmonologist, PAH specialist and researcher Dr. Tim Lahm is a co-investigator on this study.

Lastly, we are extending our studies of exercise as therapy to a related but distinct pulmonary disease - pulmonary embolism (PE). There is no data addressing safety and efficacy of exercise for patients who have suffered a PE. In collaboration with Emergency Medicine's Dr. Jeff Kline, we are investigating how training impacts outcomes in a PE rat model. Dr. Evandro Neto Neves will be mentored on a two-year post-doctoral fellowship grant funded by the American Heart Association for this project.

Yoga and Veterans: A Study in Neurological Rehabilitation Therapy

By Ric Burrous and Kristine Miller, PT, PhD

As a youngster, Dr. Kristine Miller knew she wanted a career working with people in the health care field. She did her homework, explored various clinical options by observing and volunteering at clinics while in high school, which led to one place: the IU School of Health and Rehabilitation Sciences on the IUPUI campus.



It has been a good home for Miller; she earned a bachelor's degree in PT in 1989 and a master's degree in therapeutic outcomes research in 2008. She also received a Ph.D. from the school in 2013. As she hoped, she has been able to make a difference in people's lives through research studies and clinical care.

As a researcher, Miller is interested in the mechanisms of motor recovery after stroke; the importance of patient adherence to rehabilitative exercise recommendations and community-based post-rehabilitation exercise programs. What she has seen motivates her. "The patients I've had the opportunity to treat in physical therapy are truly amazing," said Miller. "The resilience of the human spirit never ceases to amaze me."

But neurological pathologies such as stroke and brain injury affect more than 11 million people collectively in the U.S. with stroke being one of the leading causes of physical disability in the U.S., and that keeps Miller focused, too. "I've experienced the frustration of limited health care resources and the challenges of providing high-quality, patient-centered rehabilitation services

that are efficient and effective for the patients we serve," she added. That frustration, in fact, led Miller into research.

"For me, those patients who didn't respond as I expected forced me to think creatively," Miller said. "After I had an opportunity to work with people recovering from brain injury, I was fascinated and intrigued. Once I started asking 'why did an intervention work or not work' and couldn't answer that question, I couldn't let it go."

Her career took a turn in 2010, when fellow SHRS faculty member Dr. Arlene Schmid, an OT and researcher in Health Services Research and Development at the Roudebush Veterans Administration Medical Center (VAMC), was doing a project with Veterans on the IUPUI campus. "Dr. Schmid started a clinical trial with veterans who had had a stroke," Miller said. "She needed a clinical PT with a research interest." The two experts connected and their efforts have continued through other projects. Their collaborative work includes studies with veterans with brain injury and veterans in the inpatient rehab unit at the VAMC.



"Veterans are wonderful to work with," Miller said. "It is humbling and inspiring to work with people in the midst of a significant medical crisis, and see them find their way back to a meaningful and productive life." Such cases resonate with Miller, including recent studies involving yoga as a therapy.



Yoga requires participants to be more aware of their bodies, stay focused in the moment, and challenge themselves physically with controlled movements and sustained postures. The approach has potential to help anyone manage chronic conditions with impairments such as decreased strength and flexibility, poor balance, pain, depression and anxiety.

Miller and fellow researcher, Dr. Matthew Bair of the IU School of Medicine and Roudebush VAMC, are currently working on a study comparing yoga and structured exercise for veterans with fibromyalgia, and are completing the first year of a four-year study. Miller knows such inquiries are part of a long-term process.

"As a profession, we've made a lot of progress, but we still have a lot of work to do," she said. "I'm just hoping as a researcher that I can help find answers."

SHRS FACULTY & STUDENTS IN PRINT

SHRS faculty and student research achievements are noteworthy, and only continue to grow as more faculty and students stress the importance of evidence-based practice. This list of publications covers January 2013 - December 2013. Faculty are highlighted in **blue** and students are highlighted in **red**. For information about the individual publications, please contact Dr. Stuart Warden at stwarden@iu.edu.

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Health Sciences Student Demonstrates Excellence Through Service

By Brenda Lawless



Jordan and Dean Austin Agho attend the IUPUI Top 100 dinner, which recognized all awardees in an event at the Marriott Hotel in downtown Indianapolis. Over 700 people were in attendance.

The IUPUI Top 100, celebrating the campus' outstanding students based on their remarkable academic achievements and dedication to community engagement, is now a well-established campus tradition in its 15th year. Since the program's creation in 2000 by the IUPUI Alumni Council and the Student Organization for Alumni Relations, the Top 100 has evolved into a highly coveted award among IUPUI's student body and is decided through an extremely competitive selection process. Nominations, submitted by faculty or mentors, are reviewed and filtered through a committee of 100 people. In 2014, there were over 1,400 submissions presented to this judging body.

Ms. Jordan Hanaway, a junior in the Bachelor of Science in Health Sciences program, made the celebrated 2014 list; becoming the School of Health and Rehabilitation Sciences' very first Top 100 student. She was nominated by her mentors because of her

strong academic performance and remarkable dedication to various extracurricular activities, which include running on IUPUI's Cross Country team, representing IUPUI as a member of the O-Team (a group of students whose role is to support new student orientation), assisting with IUPUI's move-in day, volunteering at the Dayspring

"I was very fortunate to come from a strong support system with a family who loves me, a team that guides me and coaches who support me. These blessings motivate me and make me want to help others."

Center and helping at a local animal shelter. In addition, Jordan organized a campus-wide student Bible study program that is held regularly at the Campus Center. Her true motivation behind all of these various activities is a strong desire to help people. "I was very fortunate to come from a strong support system with a family who loves me, a team that guides me and coaches who support me. These blessings motivate me and make me want to help others." Her future philanthropic plans include participating in the Best Buddies of Indiana program — an organization that matches volunteers and people with intellectual and development disabilities, with the goal of providing friendships and leadership experience to their constituents. Her summer plans include a mission trip to the Dominican Republic in July to help rebuild sugarcane villages with the Freedom Missionary Baptist Church of Indianapolis. She also hopes to extend the school's winning streak by competing in the 2014 IUPUI Regatta later this year.

Jordan's academic goal is to attend the school's Master of Science in Occupational Therapy program. It is through her study of health sciences that she found herself drawn to the study of disability in society, and she looks forward to expanding her knowledge and experience in OT's challenging graduate program.



Representing the IUPUI Cross Country team, Jordan prepares for an event last fall.

What Happens at the PT Federal Advocacy Forum Anyway?

By Sarah Crusler, Student Physical Therapy Class of 2015

I have always wanted to be involved in politics - a rally-going rebel with a cause. But until April, I never truly knew how. As a future PT, I know my cause will be protecting the full scope of practice within health care, and the practice of ethical, fair, and reasonable health care nationwide. The Federal Advocacy Forum provided me with the tools I need to advocate for my profession.

On the first day I had yet to meet my fellow Indiana constituents, but attended a regulatory update that covers changes to existing laws and their impact on practice. As a student, this was difficult to follow, but was a good entry point for the social aspect of the conference. After the update, the crowd milled around upstairs for a reception and speech. It was here, through blatant nametag searching, that I crossed paths with my fellow Hoosier advocates.

We started on Monday with PTs catching up and meeting first-timers with excitement. Then the day began with an inspirational speech by Brad Fitch, from the Congressional Management Foundation, on how to build relationships and effectively communicate with elected officials in Washington. Afterward we separated for break out sessions. In the student session, we were given a clear, organized breakdown of the workings of Capitol Hill, what goes in to passing a bill, and what exactly was expected of us as students the next day. It was an easy-to-understand, helpful lecture to give me the tools I needed to feel comfortable. My next session was called "Hot Topics." It covered legislative issues in physical therapy outside of the three main bills we were to advocate for the next day. Then it was time for lunch.

Next we learned more about the three bills we would support on Capitol Hill. I was given a sheet with my speaking points, and details of each bill. The Indiana representatives received materials to hand out to congressmen and congresswomen and we divvied up who would speak about which bill.

By the end of the day I was prepared to talk about my assigned bill – supporting inclusion of recent graduate PTs in the National Health Service Corps. The other topics included repealing the Medicare therapy cap and removing physical therapy from the Stark Law exceptions list. First, we met with both senators' offices, gave our spiels for each bill, answered questions from the aides, and shook hands. In the afternoon, we gave folders of information to the offices of representatives for whom we did not have constituents. We also met with the offices of each representative we could. Two of



Indiana representatives to the PT Federal Advocacy Forum are (l to r) Blair Frye, PT, Indiana Federal Affairs Liaison, Sarah Crusler, IU SPT, Keith Groppe PT, MSPT, OCS, and Albert Wong, SPTA University of Indianapolis.

those meetings included the Congressman himself – an exhilarating moment to work face to face to convince them to co-sponsor our bills. Each meeting lasted only about 15-20 minutes and while we did not get any definitive answers on new co-sponsorship, I felt confident we spoke passionately about the issues.

I left Capitol Hill feeling exhilarated and inspired. Speaking to the representatives and their aides, I felt prepared and knowledgeable on the topics and comfortable because I was advocating for something I truly believed in. Speaking to my peers upon my return made me feel even more confident as I explained what bills were present and how incredible it is to work with PTs from around the country to increase support and knowledge of the physical therapy profession. The Federal Advocacy Forum is a fool-proof way to learn about political advocacy from the ground up and to immediately implement new skills on Capitol Hill. It is a perfectly designed gateway into supporting this field politically.

BSHS Student is Named the 2014 SHRS Chancellor's Scholar

By Brenda Lawless



Elanor accepting her award from Chancellor Bantz (left) and Dean Agho (right) at the 2014 IUPUI Honors Convocation.

Elanor Bolles, a 2014 graduate of the Bachelor of Sciences in Health Sciences program was selected for the 2014 School of Health and Rehabilitation Sciences' Chancellor's Scholar. Every year the IUPUI campus holds an Honors Convocation to celebrate the best undergraduate students nominated by their individual schools.

The Dean was thrilled to recommend Ms. Bolles who had achieved a perfect grade point average as an undergraduate. Elanor found the health sciences program curriculum very beneficial to her interests and goal of attending graduate school. She is drawn to health and the physical therapy profession, and hopes to pursue a career in health research.

Elanor was raised with an appreciation of community service, and she is a regular participant in the 4-H program and the Indiana State Fair. In addition, she is very active in her church and their community outreach goals. Elanor plans to work in a rehabilitation technician position while she is determining which

graduate program is best for her goals. In the meantime, she will enjoy her favorite pastime of competitive figure skating. The School of Health and Rehabilitation Sciences congratulates Elanor on her many accomplishments.

Second BSHS Graduate Moves into New PA Program

By Brenda Lawless

As our Physician Assistant Program welcomes its second class of students, the School recognizes a Health Sciences student who has been accepted into the challenging program. Jennifer Smedley has known since her early years of high school that the PA profession was her destiny. While she had an interest in the medical field, she has found that the physician assistant role appealed to her the most due to the strong patient focus.

The biggest draw to the IU PA Program for Jennifer was the strong family atmosphere. She noticed early on in her search that the IU program is a very close-knit group that always works together. From the beginning, she noticed the faculty truly cared about their students' success. "When I learned that Dr. Kelton meets with his students each week, I was very surprised. To make them a top priority when he is so busy was remarkable to me. He wants to be involved and he even personally called me to let me know that I got into the program," Jennifer

remarked. It was those small touches that made the choice an easy one for her.

The day after the 2014 Post-Commencement ceremony in which she graduated with top honors, Jennifer began her orientation into the PA Class of 2016. We are certain that she will be very successful in her endeavors and will make a remarkable physician assistant.



Jennifer prepares to walk in the 2014 commencement ceremony.

IU SOC Making Strong Progress with Awards and New School Partnerships

By Brenda Lawless & Sharon Pape



Accepting the award are (l to r) OT students Jana Jordan and Priscilla Hung, and PT students Lydia George, Chelsea Bird, Maggie Cappel, Kathryn Goncalves, and Dean Austin Agho.

The 2013-2014 academic year was very fruitful and positive for the IU Student Outreach Clinic (IUSOC). The free clinic, managed and serviced by student and faculty volunteers, received the 2013 Governor's Service Award for its dedication in providing pro bono services to Indianapolis' underserved populations. The Governor's Service Award is presented to groups or individuals who provide a significant positive impact through their efforts. The clinic provides gratis health care services (medicine, pharmacy, social work, dentistry, legal, physical and occupational therapy) to address a disparity of needs in the community.

In August 2013, the Department of Occupational Therapy became the seventh and newest service partner at IU SOC. OT Services are now provided monthly with plans to increase to bimonthly in fall 2014. These services include patient education for pain management strategies,

hand and upper extremity rehabilitation, helping clients create sleep and rest routines, addressing psychosocial strategies to cope with smoking cessation and other interventions. With help from faculty advisor, Sharon Pape, the OT students presented research on their interprofessional experience at several events, on their interprofessional experience, and will be submitting their research to the 2015 OT National Conference.



2014 IU STUDENT OUTREACH CLINIC OPEN HOUSE

August 23, 2014 • 1pm-3pm • 3102 East 10th Street, Indianapolis • RSVP to promotions@iu-soc.org

SHRS Rules at IUPUI 2013 Regatta



The School of Health and Rehabilitation Sciences was very well represented in the 2013 IUPUI Regatta. Four SHRS boats competed in the half-mile canoe relay race through the Indianapolis downtown canal, and the PT team 'Canoe Keep Up' was a winner in the female division (photo to right). For 2014, we are planning for great things yet again and hope to have another four boats in the event.



OT Scholar Receives 2014 Sothmann Dean's Leadership Award

By Brenda Lawless

Jessie Halle, a 2014 graduate of the Master of Science in Occupational Therapy (MSOT) program, was selected for this year's Dr. Mark Sothmann Dean's Leadership Award. Dr. Sothmann was the founding dean of the IU School of Health and Rehabilitation Sciences, serving from 2004 to 2007. This annual endowed award was funded by Dr. Sothmann, and it recognizes an undergraduate senior or graduate student who exemplifies Dr. Sothmann's dedication to scholarship, leadership and service to the profession and community. The recipient must have a minimum 3.75 GPA and an established record of service to the school, profession and community.



Jessie and her mother take the opportunity to celebrate both her graduation and Mother's Day at the Indiana Convention Center.

Jessie earned her Bachelor of Science in Psychology at the University of Southern Indiana in Evansville, Indiana. It was there that she learned about the occupational therapy profession and turned her eyes toward IU. Upon reflection, Jessie notes that what she loved the most about IU's Master of Science in Occupational Therapy program was the interaction and support from the faculty, staff and dean. They were always available, friendly and helpful – in fact, it felt more like a second family than a school environment. Everyone in the school cared about her success, and because of this, she is fully confident that she will become an outstanding occupational therapist.

During her academic career at IU, Jessie was the president of the Student Occupational Therapy Association. In that role, she stressed the importance of community engagement and led eagerly by example. Among the numerous activities in which she participated are the IUPUI Motor Activity Clinic, various Special Olympic events, including Polar Plunge and Color Me Rad, various golf outings, Theraplay Hoedown, the IU Student Outreach Clinic and numerous others. Occupational Therapy is a profession that is strongly rooted in community service, and Jessie exemplified that quality with enthusiasm every day at IU.



In addition to excelling in academics and community service, Jessie was also an active researcher. Assisting Dr. Patricia Scott in her investigations of post-liver transplant recipients and their lifestyles, Jessie had the opportunity to present her research at the 2014 American Occupational Therapy Association's annual conference. She found it exhilarating to work with fellow clinicians and researchers on evidence-based practice.

In her post-commencement speech to her fellow classmates, Jessie discussed the various reactions of a carrot, egg and coffee bean. Of the three, the only one to stand up to adversity and change was the coffee bean. She advised her classmates to be like the coffee bean. "As students, we faced adversity of our own trying to balance school, significant others, learning to collaborate among disciplines and other students in group projects. As health science graduates, research scientists, therapists and dieticians, we will help our clients face adversity. We will have patients who will be disheartened by their progress or situation. They may want to give up, but we will not let them. We will help them regain their strength, mobility, nutritional intake and independent living skills and help them achieve their goals. Thanks to our dedicated, encouraging, expert and compassionate faculty and staff at IU School of Health and Rehabilitation Sciences, we are prepared to not only be coffee beans ourselves, but to help our patients become coffee beans and face adversity to change their situations."

2013-2014 SHRS Student Scholarships

Our students continue to benefit from the school's number one philanthropic priority – student scholarships and awards. Please join us in congratulating the 2013-2014 scholarship and award recipients!

NUTRITION AND DIETETICS

[Dr. Sheila Ward Fellowship](#)

Amy VanDeWielle

[Arlene Wilson Fellowship](#)

Jenna Rinehart

OCCUPATIONAL THERAPY

[Katherine Belzer Fellowship](#)

Brandi Eastham, Sarah Koning, Katie Whiffen

[Carol Duke Nathan Fellowship](#)

Jessica Bertram, Deana Schuman

[OT Student Research Presentation Award](#)

Amanda Burkert, Alyssa Gutierrez
Leah Jones, Erika Threlkeld

[ASAHP Scholarship of Excellence Award](#)

Brittany Vanbastelaer

PHYSICAL THERAPY

[Patricia Rae Evans Fellowship](#)

Marion Gore, Lynn Hardy

[Stephen O. Jones Fellowship](#)

Mary Hammond

[Community Engagement Award](#)

Maggie Cappel, Kathryn Goncalves

[Zachary Gregory Emerging Leadership Award](#)

Sara Gleason

[Constance Brown Fellowship](#)

Nathan Denning, Nathan Miller

[William D. Porter Award](#)

Ashley Parsons

[Katherine Belzer Fellowship](#)

Nathan Denning, Edward Doyle
Rachel Handt, Kirk Johnson, Carrie Swartz,
Micah Whitted, Kyle Yoder

[Frances Ekstam Fellowship](#)

Carolyn Ebbens

SCHOOL-WIDE AWARDS

[Mark Sothmann Dean's Leadership Award](#)

Jessie Halle, Occupational Therapy

[Dean's Academic Excellence Recognition Award](#)

Gifts to the SHRS Annual Giving account funded 10 additional student merit-based awards this year!

Audrey Dubord
Holly Giersch
Tanner King

Kayci Silcott
Sarah Tubergen
Keri Hacker
Shelby Miller

Katherine Bridgeman
Jacquelyn Fletcher
Andrew Wiseman

Students and School Leaders Create the SHRS Student Council

By Joyce Mac Kinnon, EdD, PT

In April of this year the SHRS Student Council was formally approved as a student organization by the university. As reflected in its constitution, the purpose of the organization is to “offer a forum for information sharing, decision making and socialization opportunities” among all students in the school. As our school has grown, and as programs such as the BSHS and MPAS have been added, we wanted to create a school culture in which students from all of our programs have the opportunity to meet each other, discuss common issues, and relate to each other as SHRS students in addition to identifying with their disciplines.

In December, students from all the school programs came together to endorse the concept of a school student organization and to approve a proposed constitution and bylaws. Application was made to the university for formal recognition, and approval was received. The current president of the SHRS Student Council is Julie Perleberg, MPAS student. Catherine Collins, DPT student, is vice president and Steven Ziolkowski, BSHS student, is treasurer. Joyce Mac Kinnon, Professor and Associate Dean, is the faculty advisor. We all look forward to working together and learning more about each other's disciplines.



Dr. Rebecca Porter

2013 SHRS Distinguished Alumni Awardee

By Brenda Lawless

Each year, the School of Health and Rehabilitation Sciences recognizes alumni who have made significant inroads in their respective professions. Rebecca Porter, PT, Ph.D., was chosen as the 2013 SHRS Distinguished Alumni Award recipient, and was presented with the award at the 2013 SHRS Interdisciplinary Research Conference last fall.

Becky exemplifies this award in every way. As a graduate of the PT Class of 1972, she was unrelenting in her drive to learn and find ways to improve health care. Of all of her blessings, she believes she is most fortunate to have studied under the IU PT Program founder, Frances Ekstam, whom Becky describes as a truly remarkable woman. Mrs. Ekstam, who

completed her PT education during World War II, was known for her commitment to the program and her students. She would take the train to the medical campus in Indianapolis each Sunday night and stay all week to take the train home on Friday evening. Not only was it unusual for the time, but it left her students in awe of her dedication to them and the profession. “She managed to put her imprint on all the students in her program and was involved in every level of PT education,” Becky reminisced. She feels that imprint was made on her as she began her career, and used Ekstam’s example as she moved up through the profession, especially when she served as the PT program director in the 1980s.



Becky (center right) receives the 2013 award from SHRS Alumni Board members, Lynn Sweeney '81 (far left), Sue Klinger '76, and Dean Agho (far right).

“We all felt special because Professor Ekstam remembered each of our names and always stayed connected to her students decades after they graduated.”

and fruitful career in academia that led from practicing clinician to faculty member to program director to her current role as Assistant Vice Chancellor for Student Services at IUPUI.

As an alumna, Becky also recognizes the importance of being active in the profession. Today, she serves as an Item Writer Trainer for the Federation of State Boards of Physical Therapy by conducting regular workshops to teach item writers how to develop questions for the PT board exam. She is also an active member of the American Physical Therapy Association (APTA) and has created a school scholarship in honor of her late husband that is awarded each year to a third-year PT student who excels in a neurological rehabilitation. Over the years, Becky has been awarded the Frances Ekstam Award from the INAPTA and the Lucy Blair Award from the APTA; but she remarked with a grin that the best rewards she has earned were kisses from her grandson and granddaughter.

What Becky feels best about regarding her contributions to the IU PT program are the individual students she has been able to help over the years. “Each class had at least one student who was struggling with various challenges, and I was very fortunate to have had the chance to assist them.” She is also very positive about the direction the program is moving today. “The program is in an exciting position now with the DPT degree in place and their research agenda doing great things.”

Becky is the fifth recipient of the SHRS Distinguished Alumni Award, which is presented each year by the SHRS Alumni Association and Alumni Board. Nominations for the 2014 award are currently being accepted by the Alumni Association, and the award will be presented at the 2014 SHRS Interdisciplinary Research and Education Conference.

A Profile of Care and Commitment: Creative Health Solutions

By Christine Baldwin

“All people deserve the opportunity to achieve the highest level of independence and quality of life.” This is the mantra of Creative Health Solutions CEO, Jeff Clayton, 1997 Indiana University physical therapy graduate.

Creative Health Solutions (CHS) is one of the nation’s leading providers of physical, occupational, and speech therapy services to the long-term care industry. The organization serves for-profit and non-profit skilled nursing, hospitals, assisted and independent living, and long-term acute facilities.



CHS’s care and commitment doesn’t stop there. Jeff and his expert team of therapists and administrators has partnered with the School of Health and Rehabilitation Science’s physical and occupational therapy programs to support the students and the clients they serve at the IU Student Outreach Clinic (IU SOC). CHS makes annual financial donations that provide needed supplies and equipment at the clinic on the near eastside of Indianapolis.

Last fall CHS collaborated with Accelerated Care Plus to provide modality equipment and pro bono student training by CHS therapists on Saturday mornings at the clinic. And CHS has supported student research and continuing education opportunities through its participation and sponsorship of the SHRS annual Research and Continuing Education Conference.

“As a graduate of the Indiana University Physical Therapy Program in 1997, I came to not only love and respect the school for the quality students that it turns out, but for the ethics and values that were placed in me and in many other students.

This is among several heartfelt reasons why CHS supports and offers assistance to the IU School of Health and Rehabilitation Sciences,” remarked Jeff.

Creative Health Solutions has been a valuable partner and friend to the SHRS’ students and the greater Indianapolis community. We salute their steadfast dedication to care!



Drs. Karyl and Eugene Rickard Embody the Spirit of Philanthropy

By Christine Baldwin



Dean Austin Agho (left) poses with 2014 Spirit of Philanthropy awardees, Drs. Karyl and Eugene Rickard (center), and thanks them for their years of dedication to the IU School of Health and Rehabilitation Sciences.

“The Spirit of Philanthropy is giving and making a difference. The schools, students, faculty, and staff of IUPUI reflect how our donors have given and made a difference. The spirit of philanthropy has brought us here today...and will shape tomorrow.”

~ Charles R. Bantz, IUPUI Chancellor

Since 1989, IUPUI schools and units have honored individuals, corporations and foundations with the annual Spirit of Philanthropy Awards. The awards celebrate the gifts and volunteer service the recipients have bestowed on the campus. These contributions remind us how important philanthropy and volunteerism are to the campus, community, and civic life.

PREVIOUS SPIRIT OF PHILANTHROPY AWARDEES

- 2013 Ron Cram
- 2010 Donald and Nancy Lamport
- 2009 Jane Gerardot
- 2007 Arlene Wilson
- 2006 Louise Goggans;
Rehabilitation Hospital of Indiana
- 2005 Anita Slominski; Rock Island Foundation
- 2004 Frances Ekstam; Sheila Ward
- 2003 Patricia Rae Evans; Nestle Foundation
- 2002 Stephen Jones
- 2001 Elton Ridley
- 2000 Family & Friends of William D. Porter;
Van Ausdall & Farrar
- 1999 Steven Wodicka
- 1998 Donald Lamport

Dr. Karyl Rickard, a chartered fellow in the Academy of Nutrition and Dietetics, served the university with distinction during her 40-year career as professor of nutrition and dietetics in the School of Health and Rehabilitation Sciences. As a pediatric nutritionist, educator, and researcher in the fields of pediatric obesity and diabetes, and cystic fibrosis, Dr. Rickard developed a nationally recognized model for clinical nutritional care for children — the Leadership Education Excellence in Pediatric Nutrition Program — and established the field of neonatal dietician. Her work in childhood diabetes was the first to demonstrate that sucrose could be included in the diets of children with well-controlled diabetes mellitus.

Dr. Karyl Rickard and her husband, Dr. Gene Rickard, endowed the Dr. Karyl Rickard Pediatric Nutrition award to support the next generation of pediatric dietitians. This annual award will recognize students who demonstrate potential for significant contributions to the profession of pediatric nutrition.

On April 9, 2014, the School of Health and Rehabilitation Sciences proudly recognized Drs. Karyl and Eugene Rickard. Please join us in applauding the Rickards’ spirit of philanthropy!

2013 SHRS Donor Recognition

The School of Health and Rehabilitation Sciences is grateful for the support provided by alumni and friends during the past year. Private support has a tremendous impact on the school and its programs, enabling us to provide scholarship support to attract and retain talented students, purchase new technology for the classroom, enhance research capabilities, and provide programs for both student and faculty development. We would like to recognize and thank the following individuals, corporations and foundations for their gracious financial support during 2013. For information on how to contribute, please contact Christine Baldwin, Director of Development, at 317-274-5151 or by email at chrwaldw@iu.edu.

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The listed gifts and pledge payments were received during the period of January 1 – December 31, 2013. We apologize for any errors or omissions. For corrections, please contact Christine Baldwin at 317-274-5151 or chrwaldw@iu.edu.

Legacy Society

The Legacy Society formally recognizes individuals who have made significant planned gift commitments to the school. If you have included the school in your estate plans, we encourage you to contact the Dean's Office so we may properly document your intentions.

Katherine Belzer*
 Patricia Rae Evans
 Jane Gerardot

Louise and Otis Goggans
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Anita Slominski*
 Sheila Ward*
 Arlene Wilson*

*Denotes deceased members

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Dean's Sustainers believe in the importance of annual, consistent giving. No matter the size of the gift, Dean's Sustainers have given to the School for at least 10 years in a row. In recognition of their decade or more of support, Dean's Sustainers receive a customized gift and recognition in school publications.

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Amy and Timothy Wiley
Nancy Yoshida

Advancing a Legacy Dr. Karen Gable

Dr. Karen Gable began her association with Indiana University in 1967 as a student and retired in 2006, devoting over 39 years to her education or academic appointments on the IUPUI campus. In 2014, her story of connection and commitment continues as she endows the **Dr. Karen Gable Health Sciences Scholarship** for future health sciences BS or MS students. She encourages others to join her at the Make A Difference Scholarship Event on June 26, 2014. Karen noted that it was her former students' insistence that there be a legacy fund in her honor that prompted her to re-connect with the School of Health and Rehabilitation Sciences in this meaningful way. Stories were retold time and again about how Karen made such a difference in the lives of her students. Her former students suggested creating a special event to commemorate her dedication and generous spirit.

Karen and a group of alumni committee members have planned a reception that will be hosted by IUPUI Chancellor Charles Bantz and Dr. Sandra Petronio at their residence. Over 500 former BS and MS Health Occupation Education alumni have been invited to celebrate Karen and raise additional dollars to support the new scholarship.

The SHRS is grateful to Dr. Karen Gable and Make A Difference Alumni Committee members, Karen Davis '86, Julia Fox '06, Kathy Hinshaw '82, Robin Janson '04, Linda Kastner '91, Lisa Keenan '01, Sharon Pape '06, and Colleen Sullivan '81.





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