Early interventions seek to improve outcomes for NICU patients
Groundbreaking news

Paraquad, Inc. held a press conference on Jan. 12 to commemorate the start of construction of its new 22,000 square-foot Accessible Health and Wellness Center. Washington University School of Medicine is a key community partner in the organization’s mission to empower people with disabilities. Pictured (left to right): David Parish, director of the Human Performance Centers at Logan University, Aimee Wehmeier, executive director and CEO of Paraquad, Carolyn Baum, Elias Michael Executive Director of the Program in Occupational Therapy and professor of occupational therapy, of neurology and of social work, Kerri Morgan, instructor in occupational therapy and neurology, and St. Louis Mayor Francis Slay.
Early interventions seek to improve outcomes for NICU patients
Washington University researcher Bobbi Pineda, PhD, OTR/L, examines the unique challenges facing preterm infants and their families

Beating the odds
A determined patient finds his way back from traumatic brain injury

A valuable lesson in stroke care
Student-run clinic helps under-resourced stroke survivors return to activities they enjoy

Learning by doing
Students learn about functional cognition through real world experiences
As occupational therapists, we believe that the definition of health and well-being cannot be defined only in a medical context. We view health as the ability to engage in occupation at every stage in the lifetime continuum. The Program in Occupational Therapy actively seeks out opportunities to impact people's lives through our research, clinical practice, community engagement and curriculum. I am proud to share with you, through O.T. Link, the stories of our work and the extraordinary people in our profession.

Faculty member Bobbi Pineda, PhD, OTR/L, examines some of the unique challenges facing preterm infants and their families. Dr. Pineda and her colleagues work together to better understand how factors such as the environment, medical conditions and interventions on brain structure affect infants' long-term outcomes. The story on page four focuses on her work including her recent grant from the Gordon and Betty Moore Foundation which allows her to build evidence on the impact of family engagement in the NICU on outcomes.

The Occupational Performance Center (OPC), a joint venture between the Program and The Rehabilitation Institute of St. Louis (TRISL), is a unique work assessment and rehabilitation program. Clinical specialist Mary Seaton, MHS, OTR/L, sees patients like 30-year-old Linden Dement, who experienced a traumatic brain injury five years ago. With Mary's help, Linden has beaten the odds and overcome many of his cognitive and physical challenges. He is successfully working toward his educational, professional and personal goals (page 8).

In our last issue, we were pleased to announce the opening of our student-run stroke clinic that provides free services for under-resourced clients to help increase their safety and independence following a stroke. Now in its third semester, the clinic has more than doubled the number of patients it serves each week (page 10). I hope you enjoy reading about this amazing progress and how working with clients impacts our students.

As educators, we constantly seek ways to bring these real world experiences into our curriculum. Faculty member Peggy Barco, OTD, OTR/L, SCDCM, partners with various local organizations to give students the opportunity to observe clients with cognitive impairments (page 12). The students meet with their client three times over the course of a month, and are able to do an hour-long interview, a functional cognitive assessment and a cognitive intervention.

There are many upcoming events that I hope you will attend this spring (back cover), including our annual alumni reception at AOTA's 96th Annual Conference & Expo in Chicago. As we approach our Centennial celebration year in 2018, we are planning several events geared toward alumni engagement and participation. You are a vital part of our history, and we will be sharing your stories (page 18) in our Centennial materials.

Please keep in touch with us through our website, social media channels and by email.

The best to you,

Carolyn Baum, PhD, OTR, FAOTA

Carolyn Baum, PhD, OTR, FAOTA
Milton joins faculty

On Feb. 29, the Program in Occupational Therapy welcomed Lauren Milton, OTD, OTR/L, to its faculty as an education specialist. Milton will teach a wide variety of courses in the master’s and doctoral programs. She will also serve as the student activities coordinator and will join a group of faculty partnering with other occupational therapy, School of Medicine and Danforth campus faculty to begin an educational research collaboration.

Prior to joining the Program, Milton spent four years as an assistant professor of occupational therapy at Maryville University in St. Louis. An educator with a philosophy grounded in a constructivist approach, Milton emphasizes learning through service in the community. While at Maryville, she developed and implemented student-centered learning activities by partnering with ten community organizations. “The most significant teaching experiences for me come in the form of service learning,” Milton shares.

Milton earned a bachelor’s degree in occupational therapy from Saint Louis University in 2001. She worked in a variety of clinical settings before earning her doctorate of occupational therapy from the Program in 2008. “My work as a clinician in various health care environments and as an owner of a pediatric occupational therapy practice continues to inform my teaching philosophy and allows me to draw upon real world experiences to enhance student learning,” Milton says.

Morgan returns to direct laboratory

Kerri Morgan, PhD, OTR/L, ATP (left), returned to the Program in Occupational Therapy on March 1 to direct the Health Promotions and Well-being for At-risk Populations Laboratory. The focus of the lab is to develop, implement and test interventions that will bridge the gap between services provided in rehabilitation and current community services. These interventions will address the health promotion of people with mobility impairments and chronic health conditions. Morgan earned her PhD in movement science from Washington University School of Medicine in 2015. Prior to her return, she completed a fellowship at the University of Alabama at Birmingham and Lakeshore Foundation Research Collaborative.

The collaborative focuses on research in applied rehabilitation science.

Dallas, Perlmutter and Taff to Receive Roster of Fellows Award

Jeanenne Dallas, MA, OTR/L, Monica Perlmutter, OTD, OTR/L, SCLV, and Steve Taff, PhD, OTR/L, will receive the American Occupational Therapy Association’s Roster of Fellows Award at the AOTA’s 2016 Annual Conference & Exposition in Chicago, Illinois. The Roster of Fellows recognizes occupational therapists who have made a significant contribution to the continuing education and professional development of members of the association through their special skills and knowledge in therapeutic practice, education and/or research.

Dallas is being acknowledged for Mental Health Practice and Fieldwork Education Leadership; Perlmutter is being acknowledged for Excellence in Education and Low Vision Practice; and Taff is being acknowledged for Advancing Education, Promoting Diversity and Supporting Collaboration. They join faculty members Carolyn Baum, PhD, OTR/L, FAOTA, Christine Berg, PhD, OTR/L, FAOTA, Vicki Kaskutas, OTD, MHS, OTR/L, FAOTA, and Susy Stark, PhD, OTR/L, FAOTA, in this honor.

The Roster of Fellows Awards will be presented during the Annual Awards & Recognition Ceremony on Saturday, April 9, from 5:45 – 6:45 p.m. at McCormack Place. The ceremony is open to the public and conference attendance is not required.

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Early interventions seek to improve outcomes for NICU patients

BY MICHELE BERHORST and BOBBI PINEDA, PhD, OTR/L

Bobbi Pineda, PhD, OTR/L, visits with Ariel Brown and her daughter, Lera, in the NICU at St. Louis Children’s Hospital.
It is not uncommon for preterm infants to remain in the NICU for several months, and those who begin their lives in this environment may experience altered sensory experiences as well as a disruption in the parent-child interaction. Such early experiences can affect an infant’s attachment and increase the risk of developmental, behavioral and emotional challenges — particularly for babies who remain in the NICU for any significant period of time.

Washington University researcher Bobbi Pineda, PhD, OTR/L, is examining some of these unique challenges facing preterm infants and their families. Focused both on identifying factors that support or impede early childhood development and optimizing outcomes for preterm infants and their families, she implements interventions that begin long before infants and their families are discharged from the NICU. As head of the Occupational Therapy NICU Laboratory, a multidisciplinary group that is part of the Washington University neurodevelopmental research team, Pineda and her colleagues work together to better understand how factors such as the environment, medical conditions, and interventions on brain structure affect infants’ long-term outcomes.

Pineda was recently awarded a three-year grant from the Gordon and Betty Moore Foundation to build evidence on family engagement in the NICU to improve outcomes. The project will involve parent engagement in care by having them provide developmentally-appropriate sensory exposures to their infants. Pineda hopes to show that providing concrete guidance to parents on how to engage and provide sensory based interventions for their infants will result in improved motor, cognitive, language and sensory outcomes for the infants, as well as improved parent-child engagement, responsive parenting, early attachment and better mental health outcomes for the parents.

Pineda and her team will be working with 72 families with infants born at least two months early at St. Louis Children’s Hospital and anticipate the infants will be hospitalized for at least one month. For this study, they searched and organized research related to sensory interventions (tactile, auditory, visual, kinesthetic, vestibular, olfactory and gustatory) in the NICU and will bring all the evidence together into a clinical practice guideline that will inform what age-appropriate sensory exposures are necessary for preterm infants across the time of hospitalization. “These types of supported exposures include the use of Kangaroo care (skin-to-skin contact), singing or reading, and low ambient light. We will educate and provide support for parents to engage in activities they can do throughout the day with their baby that will be supportive of their development. We are hopeful that the interaction will be good not only for the infant’s development, but also that it will set a foundation of engagement and interaction that can carry through to the home and promote better outcomes in terms of parent-child relationships,” Pineda says.

In 2014, 1 of every 10 babies was born premature in the United States.

Source: Center for Disease Control
Collaborating with Pineda on this effort is Joan Smith, PhD, RN, NNP-BC, associate professor and advanced practice clinical scientist at Goldfarb School of Nursing at Barnes-Jewish College. Smith, a certified neonatal nurse practitioner focused on family-centered care, serves as the nursing principal investigator (PI) sub-award grantees and believes this marriage of nursing and OT in the NICU is vital to improving outcomes for families.

“The importance of a collaboration between nursing and occupational therapy is that it provides newborns and their families with a comprehensive, holistic, and preventative approach to care both during and following their NICU stay,” Smith says. “Infants born very preterm are at high risk for long-term morbidity that is not fully explained by their clinical course and disease. The influence of the NICU environment (which is quite complex) on long-term neurodevelopment is in its early investigative stage, and our ability to collaborate across disciplines and examine appropriate sensory exposures for very preterm infants allows us to bring complementary perspectives, knowledge, experience and skills that can result in innovative approaches to care.”

Pineda has also assembled a parent advisory board comprised of a multidisciplinary group of health-care professionals dedicated to patient engagement and providing optimal health care. The board will offer guidance on how to best engage parents at each stage of the project. Pineda and her team believe this research can have an immediate and powerful impact on infants who are enrolled in the study, but they also share a positive view of what the NICU experience could be like 10 or 20 years from now, as the results of this research could change neonatal care.

“Parents can fill an important and powerful role within the NICU environment, if only given the tools and support to do so. What can result are positive effects for both the parents and the infant.”
— Bobbi Pineda, PhD, OTR/L

Personal experience shapes professional path

Pineda was drawn to this work by factors that were both professional and personal. Early in her career, Pineda worked as a clinical occupational therapist in many different pediatric settings. Providing OT services in a hospital setting appealed to her because she was interested in defining and implementing interventions that could change a person’s health trajectory starting immediately after an injury or illness. The NICU quickly became one of her favorite places to work. “Interventions at the beginning of life, in the NICU, intrigued me; it was amazing that such a large impact could be made for such a small infant,” Pineda says.

Pineda’s interest in mothers and their infants in the NICU intensified following the preterm birth of her first child. Pineda experienced the desire to parent her own newborn while also feeling a lack of control, a common psychological challenge experienced by parents in the NICU. She vividly recalls her initial reaction to seeing her son in the NICU’s isolette under the bilirubin lights used to treat patients with jaundice.

“All I wanted to do was hold him, but the nurse would not permit it,” Pineda recalls. “As a parent, it was devastating to hear that I could not hold my baby.” A nurse practitioner witnessed Pineda’s reaction to being unable to hold her child, reassessed the situation, and enabled her to hold her preterm infant. “The act of holding him was therapeutic for both of us. His heart rate lowered, and he relaxed against me. It improved my emotional health and gave me the ability to participate in the parental role,” she adds.

The technology-laden atmosphere of the NICU environment, along with stressors related to preterm birth, can affect the health and well-being of both the infant and the family, making it difficult for parents to take on parenting roles. Different approaches to family-centered care in each NICU can impact how and when parents can engage with their infants, and many parents feel overwhelmed by uncertainty when interacting with their preterm babies within the medical environment. “Parents can fill an important and powerful role within the NICU environment, if only given the tools and support to do so. What can result are positive effects for both the parents and the infant,” Pineda says.

Families may need guidance and support to engage appropriately with their infant in the NICU. Infants are sometimes exposed to painful experiences, but parents can be taught how to comfort them and minimize their pain. Parents can also provide positive sensory exposures, such as holding their
infant skin-to-skin, talking to them, playing soft music, and massaging or rocking them. These sensory experiences may mimic some of the exposures they would have received if born at full term, and they are important for establishing positive foundations of memory, learning and sensory processing. While OTs in the NICU may be responsible for providing age-appropriate sensory exposures to promote better outcome, they also have a very important role in guiding parents to provide these positive experiences to their infant. "The amount of brain development that occurs in the NICU for the preterm infant is significant; it provides a window of opportunity for therapeutic interventions that can lower the risk of developmental problems. One constant force in the life of an infant is the presence of parent; OTs can make the largest impact on the infant by instructing and empowering parents to conduct therapeutic interventions with their infants," Pineda shares.

**Engaging students to make a difference**

Pineda’s work also offers OT students the opportunity to participate in the NICU lab’s team-based activities, learn core knowledge related to being a neonatal therapist and engage in many aspects of clinical research in the NICU.

OTs have held a presence in the NICU for decades, and due to the recent founding of the National Association of Neonatal Therapists (NANT), policy change, collaboration, interest and focus on the important role of neonatal therapists has grown substantially.

“The National Association of Neonatal Therapists was created in 2009 specifically for neonatal occupational therapists, physical therapists and speech-language pathologists. Founder Sue Ludwig, OTR/L, NTMTC, has done a phenomenal job to advance the science of the NICU through promoting professional collaboration and access to specialized continuing education for neonatal therapists,” shares Pineda, who is a NANT member. In addition, the American Academy of Pediatrics (AAP) has identified that a neonatal therapist should be on staff in NICUs designated as level three or four, as they take the most critical infants. Due to the high risk of developmental challenges and the potential impact of developmental interventions that start in the NICU, therapists are an important part of the NICU team. As interest in neonatal therapy increases, pathways for entering this practice setting are becoming better defined, and implementation of neonatal interventions for preterm infants continues to be improved.

Neonatal therapists must have advanced knowledge and training, as engaging with infants and their families in the NICU is often high-risk and requires specialized skills in neonatal intensive care. Pineda is the chair of the new Neonatal Therapy National Certification Board, which is charged with developing and implementing a certification process for neonatal therapists. “This is an important process, as it will provide those who want to engage in practice in this setting a pathway to achieve the skills and experiences needed to work with high risk infants. It also will ensure that therapists undergo specific education and training to prepare them for work in the NICU in order to ensure safe, competent, targeted and evidenced-based therapeutic interventions,” Pineda says.

“Ideally, we would love for premature birth to be eliminated completely. However, as long as infants continue to be born prematurely, it is critical that we figure out what the most effective intervention strategies are in the NICU, so that we can provide the best environment for babies and their families to optimize their health and outcomes,” Pineda says.

“Most students entering the lab are interested in being a neonatal therapist or have a strong desire to work with young infants. The students select their own research projects, which can range from breastfeeding to environmental exposures to early neurodevelopmental testing. Students engaged in the NICU laboratory are encouraged to present at state and national conferences, and many publish their work in peer-reviewed journals,” Pineda says. “Educating the next generation of OTs and contributing to literature that can improve neonatal care is where I feel I can make the biggest impact on the profession.”

Pineda hopes her research and that of her students and colleagues will one day improve care in the NICU. “The point of intensive care is to necessitate lifesaving medical interventions. However, therapeutic interventions by a neonatal OT can be adapted to the medical environment and individualized for each infant, so that all care is intentionally supporting the infant’s development as well as the parent-child relationship. Waiting to introduce therapy until an infant is close to discharge or already discharged from the NICU fails to take advantage of a critical window of opportunity and the potential to impact the foundations of development that will support future participation,” she says.

“While the type and intensity of early OT may look different in the NICU compared to in the clinic, both can be done, and both can have significant effects on development. OTs are master clinicians in adapting their interventions to suit the needs of the client and the environment, and thus are an important part of the neonatal team. There is so much we can be doing in the NICU in terms of neuroprotective care to impact long-term outcomes. Our goal as researchers is to provide the evidence to support the best interventions that can improve care and optimize outcomes for infants and their families.”
Now in his final semester, Linden De Ment sits in the Center for Student Success at Ranken Technical College.

Although he’s completing the final course required for his degree at Ranken Technical College, 30-year-old Linden De Ment is not your typical student. Since sustaining a traumatic brain injury from a fall in his garage in 2010, De Ment has spent much of the last five years re-discovering himself and uncovering what brings him meaning as a client at the Occupational Performance Center, a joint venture between the Program in Occupational Therapy and The Rehabilitation Institute of St. Louis (TRISL).

De Ment’s injuries were severe. Upon admission to Barnes-Jewish Hospital, he was given only a one percent chance of survival. Physicians told his parents that – if he lived – he would likely never walk again and could have significant cognitive delays. Against all odds, De Ment survived the ensuing surgeries and began to show miraculous improvement. One month after being admitted to Barnes-Jewish Hospital, he was transferred to TRISL, where he completed three months of inpatient rehabilitation. “Linden had to learn how to eat again, walk again, talk again; he said his first words again,” shares De Ment’s mother, Leah De Ment. “It was a long process and sometimes he’d take two steps forward, only to turn around and take two steps back.” De Ment’s continued progress led to his discharge from the hospital in July and a referral to Washington University’s Occupational Performance Center (OPC), where he began working with Mary Seaton, MHS, OTR/L.

“We’re often referred to as a return-to-work type of program, but that’s only one component of what we do; we also explore ways to enable our clients to participate meaningfully in other environments, including school or a volunteer role,” Seaton says. The OPC staff uses a variety of assessment tools, education and other interventions to understand a person’s capabilities and

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Community Practice

A determined patient finds his way back from traumatic brain injury

“Within the OPC, we partner with our clients one-on-one to identify the things that are uniquely important to them. Our focus is on matching the client with community-based roles related to their interests and realistic capabilities.”

– Mary Seaton, MHS, OTR/L
“My goal as a therapist is to get him where he needs to be, where he wants to be, but also somewhere that’s realistic.” – Mary Seaton, MHS, OTR/L

limitations when determining next steps and possible opportunities.

“When I first met Linden, he was determined to get back to work and school as quickly as possible,” shares Seaton. “He was used to going full speed ahead, and expected his life to pick up right where he left off before the fall.” Although De Ment is highly motivated and energetic, his expectations and self-awareness of his abilities following the accident weren’t entirely accurate. The two had to prioritize their goals and form a plan together. “My goal as a therapist is to get him where he needs to be, where he wants to be, but also somewhere that’s realistic. Linden, like much of the population we work with at the OPC, experienced some expressive and receptive communication difficulties (aphasia) and lingering cognitive effects, and he requires reasonable accommodations to be successful,” Seaton says. “He has remained consistently positive and motivated to move forward despite these performance challenges, and that has made all the difference.”

Through a process of guided exploration of his interests and then performance of simulated work/school tasks which tap into critical social, cognitive and physical demands, Seaton and De Ment began to identify the things he could and couldn’t do. “With Linden, we determined that he wasn’t ready to return to both work and school at the same time, so we focused on getting him ready to return to work roles first,” says Seaton. “Starting out in a volunteer role may help to ease the transition back into community life and is an activity that we use as appropriate to each client.”

After simulating performance demands, they explored volunteer opportunities that seemed to be a good fit for De Ment’s skills. Before his injury, De Ment was pursuing his associate’s degree in information technology at Ranken Technical College and waiting tables at a local restaurant. Given his interest in computers, they connected him with an organization that cleans and restores donated computers prior to distributing them to under-resourced students. For months, De Ment participated in several volunteer roles with community organizations to explore various possibilities.

When De Ment was ready for full-time work, they partnered with Vocational Rehabilitation, a government program that assists eligible persons with disabilities in obtaining and maintaining quality employment. Vocational Rehab was able to help place De Ment in a paid role with a home improvement store in 2013. Encouraged by his progress in the workforce, De Ment was determined to return to school and finish his education. Again, he turned to the OPC for help in 2014. “I was three classes short of finishing my degree,” De Ment says. “Just three classes. I had to go back.”

After tackling transitions to work and community life, De Ment found that his return to school would require additional analysis and preparation. “Each time a person wants to switch roles or try something new, we have to start the process over again to some extent,” Seaton says. “This involves ensuring that the client is fully aware of his/her abilities, teaching strategies to accomplish identified goals and tasks, and developing routines to participate in the new work or behavior.” In order to identify reasonable accommodations that would enable De Ment to be successful in the school environment, Seaton served as a liaison with De Ment’s counselors and the team at Ranken. Now, De Ment has completed two of the remaining three courses required for his degree, and is finishing his final requirement, English Composition II. “This class will be a challenge for Linden,” shares Seaton. “It requires significant reading, writing and comprehension, and those remain difficult for him. We’re revisiting his documented accommodations list, and working with the school officials every step of the way throughout this class, so that he can accomplish his goal.”

According to Leah De Ment, her son was always extremely motivated in life. “He’s always been busy and social – prior to the accident he was going to school and working two jobs, so his determination comes as no surprise,” she shares. “It’s like he sees himself from the outside, and he doesn’t like where he’s at, so he wants to move forward and onto the next thing.”

She attributes much of her son’s continued success to Seaton and her willingness to work with him throughout each stage of his recovery. “Mary is so positive and encouraging,” she says. “She always takes the extra time to find answers to any questions that you may have and always has his best interest at heart. She seems to identify right away with what his wants are, so she can work from his perspective. Mary is awesome and this is exactly where she should be – she takes her time, she cares, and always follows-up to help her clients succeed.”

Once De Ment receives his degree, he plans to get his driver’s license, settle into a new apartment, meet the right girl and find a job in his field of expertise. Though not necessarily in that order, says Leah. “I don’t know what Linden will decide to do next, but we are so grateful for his recovery, and incredibly thankful to Mary for all the help she’s provided over the years.” – Leah De Ment

Mary Seaton, MHS, OTR/L (left), meets with Keith Morton, academic support coordinator, and Pariss Reese, academic advisor, at Ranken Technical College to discuss De Ment’s progress.
Since it began accepting patients in the spring of 2015, The Program in Occupational Therapy’s student-run stroke clinic has offered free services for under-resourced clients to help increase their safety and independence following a stroke. Initially developed as a doctorate project in 2014, the clinic has experienced steady growth and now partners with the program’s Community Practice to further enhance its services. In only its third semester, the clinic has more than doubled the number of patients it serves each week.

Meghan Doherty, MSOT, OTR/L, the primary supervising clinician for the stroke clinic, notes the importance of flexibility as the clinic evolves. “We continue to learn and adapt as we go along. As the numbers of students and clients flux, we respond by shifting our model of supervision and support. Our goal is to grow in a manageable way." -Meghan Doherty, MSOT, OTR/L

Student-run clinic helps under-resourced stroke survivors return to activities they enjoy

Staffed by students, the clinic serves those who have suffered a stroke and are either uninsured or underinsured. Second-year students provide weekly one-on-one care to patients for a period of 12 weeks. Oversight

Guided by Mackenzie Schaefer, MSOT/S ’16, Dorothy Edwards (left) walks down the hallway with a bag of trash to simulate her activities of daily living during her session at the student stroke clinic.
is provided by third-year students, as well as a licensed clinician, during each session. That consistency helps clients build a relationship with the student and results in better care, says second-year student Mackenzie Schaefer, MSOT/S ’16. Schaefer has been paired with Dorothy Edwards, who suffered a stroke in August 2014, and the two are now in their second semester of working together.

“Since we work with the same client each time, we get to know them extremely well. The experience mimics what we would find in the real-world, where we form that ongoing relationship with a client,” shares Schaefer. It’s the real-world experience that drew Schaefer into this particular learning track as she pursues her degree. “Before coming to WashU, I worked in an outpatient clinic and I was able to work one-on-one with clients. I loved everything about it. The stroke clinic is where I can have a client of my own; it’s a place where I can get hands-on knowledge. I really enjoy being able to take what I learned from lectures and implement it into working with Dorothy each week.”

Edwards’ stroke impacted her balance and mobility. She had to give up much of what she loved doing, including gardening, yardwork, upholstery and bible class. Upon being referred to the stroke clinic, Edwards began working with Schaefer on setting goals and developing strategies to help her return to the activities she loves. “I like working with Mackenzie because she explains things to you well and helps you do the stuff you can’t do and try to do. She encourages you to take baby steps and try again,” says Edwards. “I recently started back to bible class and am getting to a place where I can do a little yardwork.” The pair continue to work on balance with the goal of Edwards returning to yardwork this summer.

Schaefer enjoys seeing the progress Edwards makes from week-to-week. “What I really enjoy about working with Dorothy is seeing the confidence she gains after trying something new and doing it successfully. Though she might initially hesitate or doubt her abilities, once we work through something and try it, I think she always surprises herself on what she’s capable of doing.”

Prior to each session, Schaefer creates a treatment plan for Edwards, follows that plan during the weekly session, and then documents her progress via a “SOAP note,” or progress note, which is later reviewed by the supervising doctoral student(s) and clinician. “I definitely think I’ve improved tremendously on writing stronger SOAP notes and being able to perform assessments. It’s a great basis to learn what you’re going to need to learn and get the practice you need with a real person, because sometimes it’s hard to get goals. She’s been able to come up with strategies herself to make sure she’s safe and able to do these things at home, and it’s nice to see that change in her, and see what she can do,” she says.

Edwards is thrilled with her progress as well, and admits that the stroke clinic has enabled her to “do more things, participate…and not feel left out.” These are essentially the goals that the clinic has for each of its patients.

As the clinic continues to grow each semester, the team welcomes new clients and referrals. “I wish everyone knew about our stroke clinic,” says Doherty. “We are serving a very important population of people who want to get back to living out their roles with family and friends in their communities.”

Questions and inquiries about referring clients to the stroke clinic may be directed to the Community Practice at (314) 286-1669.
Students learn about functional cognition through real world experiences

BY MICHELE BERHORST

There is only so much that lectures, labs and role play situations can teach an occupational therapy student. Peggy Barco, OTD, OTR/L, SCDCM, instructor for the Interventions Supporting Recovery and Participation in Individuals with Cognitive and Learning Challenges course, knew from her own experiences as a clinician that cognition wasn’t something that could be learned exclusively in the classroom.

“Each client has their own unique personality and goals. Clients with cognitive issues often do not have just one set of issues; they may have several impairments that present simultaneously such as comprehension, expression, performance perception and memory/attention,” Barco explains.
“Being able to observe these impairments during a session and use clinical reasoning to help develop the strategies to manage them through the everyday challenges that they experience is the essence of occupational therapy intervention.”

When Barco first began teaching the course eight years ago, she sought opportunities that would allow students to work directly with clients by reaching out to facilities with which she had existing relationships in her role as a clinician. “We cannot offer this experience to our students without the help of our community partners. We are sensitive to the clinical demand at each facility, and we work with and around the clinicians’ time. The Program provides the supervision for the students, and the assessments and interventions are approved so that we know they are appropriate and safe,” Barco says.

Barco has partnered with various local organizations including SSM Health Care’s outpatient therapy centers (in DePaul and Florissant), Ranken Jordan Pediatric Bridge Hospital, Alternative Opportunities, the Center for Head Injury Services, and The Rehabilitation Institute of St. Louis. Students work in small groups and see clients with cognitive impairments who have recently transitioned into outpatient therapy or been discharged to their home. These clients can have a variety of diagnoses including stroke, traumatic brain injury (TBI), Parkinson’s disease, dementia and/or developmental disabilities.

“The students meet with their client three times over the course of a month. They are able to do an hour-long interview, a functional cognitive assessment and a cognitive intervention,” Barco says. “This experience takes the student from learning about frameworks/models of cognitive intervention to choosing which intervention models are appropriate to the clients, and how to apply the intervention techniques to the unique functional needs of clients.”

Alison Kwalwaser, OTD/S ’17, and her group experienced those unique functional needs first-hand while working with a 35-year-old female who sustained a work-related TBI in 2011. “The client presented with specific cognitive impairments including aphasia, difficulty ‘finding’ the right word and ‘sensory overload.’ In addition, she expressed concern with her inability to plan ahead, divide her attention among multiple tasks simultaneously, and follow written or verbal instructions,” Kwalwaser recalls.

While their client was able to return to work and live independently after her TBI, she was still having struggles with common activities of daily living such as grocery shopping and cooking independently. Kwalwaser and her group chose a cognitive assessment to identify her cognitive impairments and determine how such impairments impact function.

“We selected the Complex Task Performance Assessment (CTPA), which assesses executive function through scoring the client’s inefficiencies, rule breaks, interpretation failures and task failures while completing cognitively demanding clerical work. After scoring the client’s performance on the CTPA, we identified that she demonstrated inefficient cognitive/ work strategies, decreased planning, decreased ability to multi-task and problem solve, incorrect math calculations and perseverative thinking,” Kwalwaser shares. “We were able to use that assessment to work on her goals of independently implementing a grocery list, navigating the store, following a recipe and making healthy smoothies for breakfast. We used the Dynamic Interactional Model when we worked with our client to develop and use strategies to help her accomplish those goals.”

Focusing on client-centered goals is an integral part of occupational therapy, but some goals aren’t always straightforward or even realistic when dealing with cognitive challenges.

“Students learn through this course that they can’t always jump to the end goal with every client; sometimes, they have to assess what the client needs to do first to get there,” Barco says. “They also learn how to identify problems when multiple cognitive, language and perceptual impairments are present. They may have to problem-solve a solution on the spot in midst of a therapy session. These types of situations can’t be replicated without a real client.”

The students find working with clients with cognitive impairments to be unique, challenging and rewarding. Following the sessions, Barco has each group share their experiences with their peers during class discussions and presentations. and she emphasizes that no two clients with cognitive impairments are alike. Kwalwaser felt that prior classroom work and role play assignments had prepared her to work with clients, but the actual interactions were much more intense.

“I felt more pressure trying to follow the correct protocol and instructions when administering assessments while trying to ease the anxiety of the client. When I was administering the CTPA to a real client, the errors the client made and the concerns she expressed were real and unique to her specific impairments from her TBI,” Kwalwaser says. “This valuable experience will influence my future practice. As an occupational therapist interested in the area of neurorehabilitation, I will be working with clients who have various cognitive impairments and are all functioning at different levels. This course has shown me first-hand the importance of identifying the specific domains of cognition when assessing a client, and developing an appropriate and beneficial intervention plan to help them progress through their recovery.”
The Program in Occupational Therapy

at Washington University School of Medicine (WUSM) in St. Louis, one of the top occupational therapy programs in the nation, has established a partnership with Harris-Stowe State University (HSSU), an institution strongly committed to providing a quality higher education experience that is both affordable and accessible to the diverse populations within and beyond the metropolitan St. Louis region.

The partnership creates a Cooperative Degree-Conferring Program of Study, which allows students to earn a dual undergraduate and graduate degree by attending both institutions. Students enrolled in this program can earn a Bachelor of Arts or a Bachelor of Science degree from HSSU in three years, then continue their education at Washington University School of Medicine, where they can earn a Master of Science in Occupational Therapy in two years or a Doctorate of Occupational Therapy in three years. The partnership with HSSU represents the commitment WUSM has made to building a culturally diverse community of faculty, students and staff and to maintaining a supportive, welcoming atmosphere.

In May 2015, HSSU announced that they would soon offer a master’s degree program. This prompted recruitment specialist Kathy Kniepmann, OTD, MPH, EdM, OTR/L, assistant professor of occupational therapy and of neurology in the Program in Occupational Therapy, to begin a dialogue with HSSU. Leadership from both institutions met in June and agreed that a partnership would be mutually beneficial and provide a national model in the discipline.

“The Washington University/Harris-Stowe State University partnership presents excellent opportunities for both institutions to advance the occupational therapy profession. I am gratified that this partnership has been established,” said Dwyane Smith, PhD, provost and vice president for academic affairs at HSSU.

The Program in Occupational Therapy is dedicated to helping the occupational therapy profession and its future leaders become more culturally diverse by actively recruiting individuals who come from rural or inner-city areas and individuals from groups traditionally underrepresented in the health care professions.

“The health care professions need to be educating a diverse workforce across many sectors – including public health, academia, community agencies and health care organizations,” said Carolyn Baum, PhD, OTR/L, FAOTA, Elias Michael Executive Director of the Program in Occupational Therapy and professor of occupational therapy, of neurology and of social work. “In order to improve population health for all individuals in the future, we need a diverse and talented group of students to enter the field of occupational therapy now.”

The agreement was signed at HSSU on January 15. Baum represented the Program in Occupational Therapy and Smith and Dr. Lateef Adelani, dean of the College of Arts and Sciences and professor of mathematics represented Harris-Stowe State University. Also in attendance from Washington University School of Medicine were: David H. Perlmutter, MD, executive vice chancellor for medical affairs and dean; Alison J. Whelan, MD, senior associate dean for education; Will R. Ross, MD, MPH, associate dean for diversity and professor of medicine; Steve Taff, PhD, OTR/L, associate director of professional education and academic affairs and assistant professor of occupational therapy; and Kniepmann.
Widening the OT perspective

After earning a bachelor’s degree in occupational therapy from Manipal University in India, Divya Sood, OTD ’07, OTR/L, worked in New Delhi for two years as an occupational therapy practitioner at a special school for children. Wanting to expand her occupational therapy (OT) perspective, Sood began looking for an occupational therapy doctorate (OTD) degree program in Canada and the U.S.

“Ten years ago, the OT practice in India was very much embedded in the biomedical model. I wanted to find an OTD program that could prepare me to be an evidence-based practitioner and enhance my knowledge and skills related to clinical research to be an effective clinician,” Sood recalls. “The Program in Occupational Therapy at Washington University offers a perfect blend of research, practice and education so that the students learn to be innovators in the field of occupational therapy.”

During her time as a student in the Program, Sood’s perspective began to widen. “The Person-Environment-Occupation-Performance (PEOP) curriculum model helped me see how participation of individuals in meaningful occupations is not only influenced by personal factors but also by environmental factors. I also learned the importance of evidence-based practice and how to use it,” Sood says.

The value placed on diversity at Washington University was important to Sood, as an international student. “Many universities I looked at had good programs, but I wasn’t sure if they were open to different opinions in OT practice. As a student and a teaching assistant at WashU, I was often asked about my experience working with clients in India. Even though my views were different, I felt comfortable expressing them because the faculty and my cohorts valued my opinion and cultural viewpoint,” Sood remembers.

Sood also enjoyed learning from the other post-professional students in the OTD program, including Claire Yang, OTD ’07, from Taiwan, and Chaya Zingerich, OTD ’07, from Israel. “It was wonderful to have conversations with my colleagues from other countries and share our international perspectives. I’m still in touch with both of them,” she says.

After graduation, Sood’s career shifted from clinical practitioner to educator and researcher. Following a brief trip to India to visit family, she accepted a faculty position as an assistant professor in the Department of Occupational Therapy at the University of Missouri in Columbia in 2008. As part of her appointment, Sood also provided clinical occupational therapy services at the Thompson Center for Autism and Neurodevelopmental Disorders. She worked there for a year and half before joining her husband in Chicago in 2009.

In May of that same year, Sood accepted a faculty position at Governors State University (GSU) in Illinois, where she is now an associate professor in the Department of Occupational Therapy. “I teach a variety of courses including theories of occupational therapy, program development and evaluation, and serve as a primary research advisor for a number of doctoral students for their doctoral capstone projects. Had I not gone through the rigorous doctoral process at WashU, this role would have been difficult for me,” Sood said.

Sood was appointed the coordinator of research for GSU’s Department of Occupational Therapy in 2013. She initiated the Partnership in Research (PIR) program for OT faculty, which provides opportunities to develop and implement research projects in collaboration with masters and post-professional doctoral students, as well as with other faculty members and stakeholders in the community. Sood’s own research focuses on how environmental factors can shape participation patterns of children with disabilities. She uses the data to develop intervention models for caregivers of children with disabilities with the goal of generating strategies to promote participation of children in various contexts such as the home, school and community environments. This research agenda is informed by her doctoral work at WashU.

“I am so grateful to WashU for igniting my passion for teaching and research.”
- Divya Sood, OTD ’07, OTR/L

Sood enjoys teaching research courses, such as quantitative and qualitative research, and preparing master’s and doctoral students to be evidence-based practitioners. “The most exciting part of my position at GSU is collaborating with doctoral students to develop and implement doctoral capstone projects; this gives me an opportunity to incorporate scholarship into practice,” Sood shares.

Because of her clinical experiences in India and the evolution of her perspective since that time, Sood was invited to write a chapter on occupational-focused models for a text book titled, “Concepts in Occupational Therapy: Understanding Southern Perspectives.” She asked Carolyn Baum, PhD, OTR, FAOTA, and three other colleagues to co-author the chapter with her. “The chapter discusses theories guiding our profession, including the PEOP model. The book will be distributed in India. I’m excited to be able to share what I have learned over the past eight years with my colleagues in India,” Sood says.

Sood credits her success to her experiences at WashU and the OTD degree program for post-professional students. “I am so grateful to WashU for igniting my passion for teaching and research. It was more than just an academic experience; it was the support system I needed to succeed and meet my career goals.”

If you are interested in the OTD degree program for post-professional students, please contact its assistant director, Vicki Kaskutas, OTD, MHS, OTR/L, FAOTA, at 314-286-1672 or kaskutasv@wustl.edu.
A rewarding career in pediatric OT

I want to take a moment to thank the university that completely prepared me for a successful future, and for developing me to become a confident, goal-driven, problem-solving professional who is making a difference in many communities.”

Those grateful words are from a letter that Carolyn Baum, PhD, OTR, FAOTA, received from alumna Heidi M. (Nemeth) Youtsler, MSOT ’94. A senior clinic manager at ABC Pediatric Therapy Network in Cincinnati, Ohio, Youtsler reflected on the career path that led her to a successful and rewarding practice in pediatric occupational therapy (OT).

“When I was 15 years old, my father had a stroke. I remember helping him around his apartment, buttoning his clothes and assisting him with various tasks so he could live independently. I knew then that helping people was something I wanted to do, but I didn’t know what OT was or that it was even a career option,” Youtsler recalls.

A native of St. Louis, Youtsler attended the University of Missouri-St. Louis for a year before transferring to Maryville University. At that time, Maryville University had a 3-2 agreement with Washington University, which allowed students to finish their bachelor’s and master’s degrees within five and a half years. Knowing that she wanted to pursue a degree in OT in St. Louis, Youtsler applied and was admitted to the Program.

“Classes were held in the old building on Scott Avenue at that time. Dorothy Edwards, PhD, was my master’s project mentor and I recall doing our presentation on a comparison of coma scales in the neurological unit of Barnes-Jewish Hospital,” Youtsler says. “I remember being nervous during the ‘fieldwork lottery’ where we picked our sites. I knew I was going to be moving to Ohio so I had selected sites here. Luckily, I got both my fieldwork choices and was able to move right away.”

After graduation, Youtsler started working with adult populations, but after observing a few pediatric OT sessions she decided to work with children. She was a school-based OT before becoming a stay-at-home mom for a few years. While attending a child’s birthday party at ABC Pediatric Therapy Network, Youtsler felt a yearning to work in the collaborative, interprofessional environment she saw there.

“The company was happy to work with me and my career goals. They provided continuing education and other opportunities for me to grow as a clinical pediatric practitioner and as a manager. I work alongside physical therapists and speech-language pathologists on treatment teams to change the lives of children and their families every day,” Youtsler says.

In her practice, Youtsler sees a variety of clients, from infants to teenagers. She helps them and their families gain independence through play, self-help tasks and school-related skills by addressing deficiencies in fine motor skill development, feeding, dressing, hygiene, handwriting, behavior and sensory integration. She often uses speech generating devices as well as non-speech generating methods in her practice. Youtsler would like her pediatric patients who can benefit from high tech communication devices to have more access to the technology available.

“Insurance will often cover the larger, more popular communication devices, but they can sometimes be hard to carry and can’t be used functionally on the playground or other places children frequently go. I have
are on permanent schedules where she sees them every week for months or even years. She shares in their joy when children are able to do things they couldn’t before.

“I help a lot of families that have children with feeding issues and they hold a special place in my heart. Parents try so hard to convince someone that their child isn’t eating well and when they aren’t taken seriously, it is very emotional. I spend the first visit with the parents learning about their situation and when they realize I am listening to them, they feel such a sense of relief,” Youtsler shares. “As parents, we want to provide the basic needs for our children. When these families discharge from the program and the child is eating well, it is such a joyous moment both for them and for me.”

Youtsler is also proud to participate in many of her company’s community outreach programs.

“We hold a free bike clinic where families can work with therapists for a day to help their children learn how to ride a bike. We provide safety tips and answer questions the parents may have about helping their child be successful on a bike,” Youtsler explains. “During the holidays, we believe every child should experience Santa in their own way. Our ‘Sensory Santa’ event provides a sensory-friendly environment for children to visit Santa on their terms. They can visit with Santa and have a photo taken in the context that is comfortable for them.”

Youtsler attributes her personal and professional successes to the education she received in the Program. She is proud of how the field has grown over the past 20 years, and openly shares her experiences with high school and college students who observe her working with her team.

“There are so many more opportunities for OTs that weren’t there when I first entered the profession. When I speak with recent Program graduates, I know that they are receiving the same high-quality education I did and are well-prepared to practice in any setting they choose.”

— Heidi M. Youtsler, MSOT ’94

Promoting advocacy

In addition to her OT studies, Gloria Sipakati, OTD/S ’17, serves in a leadership role promoting community advocacy. She represents the Program in Occupational Therapy at the Missouri Occupational Therapy Association (MOTA), and shares with her classmates how occupational therapists can move the profession forward and advocate for health care policy reform.

“These kinds of experiences inspire students to make occupational therapy better, and the Program gives us the tools to do so,” says Sipakati, who is thankful for alumni donations. “I want you to know that students are thankful for your contributions – you make our scholarships possible and give us financial peace of mind. The Program dedicates 100 percent of all Occupational Therapy Annual Fund donations to scholarships; even if we do not have the opportunity to meet you, please know that we are grateful for your help in making our education possible.”

Your donation to the Occupational Therapy Annual Fund helps support future occupational therapists as they advocate for the profession and impact the communities they serve. A gift to the Program fills an immediate need by lessening the debt burden on its students, allowing them to focus on their education and training. Donations also may be made in honor or in memory of an individual.

Checks should be payable to Washington University and mailed to:

Program in Occupational Therapy
Washington University School of Medicine
4444 Forest Park Ave., CB 8505
St. Louis, MO 63108-2212

Give online through our website at
ot.wustl.edu/alumni

If you have any questions about the Occupational Therapy Annual Fund, please contact Patrick Delhougne in Medical Alumni and Development at 314-935-9680 or p.delhougne@wustl.edu.
Currently featured on the cover of this newsletter and in the center of our Centennial logo, the familiar door graphic has been used frequently over the past 25 years on various Program in Occupational Therapy materials. The origin of the graphic, along with the name of its designer, seemed lost to time until the artist, an alumna, attended the Program’s annual alumni reception at the 95th American Occupational Therapy Association (AOTA) Conference & Expo in Nashville, Tennessee, in April 2015.

Christine Eppert, BSOT ’90, has always had a love for the visual arts. “Growing up, I had some artistic influences; my mother had a great eye for design, and my great grandmother created beautiful handiwork even after several strokes limited her physical abilities. As a child, I spent much of my free time doing arts and crafts, and for years I created handmade gifts for my friends and family. So I guess you can say that my early history definitely had some occupational therapy (OT) roots,” Eppert fondly recalls.

Encouraged by her high school art teachers, Eppert’s love of art grew, as did her interest in helping others. During the summers, she volunteered at an Easter Seals Day Camp, where she not only enjoyed interacting with the children, but was inspired by the work of the counselors and therapists. Following high school, Eppert studied fine art at the Philadelphia College of Art in Pennsylvania before moving back to St. Louis, her hometown, to continue her education. “After art school, I started looking for a ‘helping’ profession that would allow me to use my creative skills. ‘Therapist’ continued to pop up as my ideal career on all my vocational tests, so I moved in that direction. During my search, I came across a Washington University Occupational Therapy (WUOT) brochure with a very professional-looking student on the cover. I remember reading about OT and thinking, ‘This sounds really cool, I want to do this,’” Eppert says. “I still have that lucky brochure.”

The late 1980s marked a turning point for the Program with the appointment of Carolyn Baum, PhD, OTR/L, FAOTA, as Elias Michael Director in 1988. “As a student, I could sense that changes were happening in a very positive direction. The Program had new leadership and perspective and there was a stronger focus than ever on research in the profession. Personally, I felt like I had just discovered this little secret called occupational therapy and I wanted to tell the world all about it,” Eppert remembers.

“Reflecting back now, the student opportunities at WUOT seem endless. From the strong coursework to the variety of fieldwork possibilities to the close relationships with classmates and professors, all of these pieces were essential in actualizing from student to clinician. For me, that collective experience was invaluable,” she says.

As Eppert’s class prepared for graduation, her fine art background led classmates to nominate her to help design the graduation program. “We had access to the standard university logos, but I wanted to create something more meaningful to the Program. As I thought about the tangible aspects of the program, the front entrance of the old building at 4567 Scott Avenue became my inspiration. The door was the most interesting architectural feature of the old building and it seemed symbolic on many levels.”

“As a new student in the program, the door represented a new opportunity in pursuing education. As a graduating student, the door represented the transition from student to clinician, and a door to the future. For our many clients, OT was the door to independence. So many OTs had crossed that threshold over the years that the door also connected us to our shared occupational therapy history,” Eppert shares.

Eppert’s original pen and ink line drawing of the door was included in the graduation program, and later became a newsletter logo. Today it continues to appear as a symbol of the Program’s rich history in various materials.

Following graduation, Eppert moved to Nashville and worked with pediatric clients at a mental health facility. Her role allowed her to develop programming that incorporated art and music for sensory-motor groups and to add contemporary life skills groups for teens. She also worked
“As I thought about the tangible aspects of the program, the front entrance of the old building at 4567 Scott Avenue became my inspiration. The door was the most interesting architectural feature of the old building and it seemed symbolic on many levels.”

— Christine Eppert, BSOT ’90

with a team to start a pediatric therapy program through Easter Seals, where she had volunteered as a teenager.

Eppert is a wife and mother of three. “My family has been an integral part of my OT journey and the creative process. When my children were younger, they were frequently peer models and helped me develop OT activities. They would come to work with me and interact with my pediatric clients. Through these experiences, my children gained awareness and acceptance of people with disabilities and learning differences. My family understood how much being an OT was a part of who I am.”

Currently, Eppert owns a private practice with four OTs on staff that partners with a speech-language therapy group to provide diagnostics, direct therapy and consultative services to private schools and preschools in the Middle Tennessee area. “Community education is a big part of our mission, so I frequently present to parents and teachers. I still enjoy creating OT materials and am currently working on a children’s OT book which I plan to self-publish later this year,” says Eppert.

Interacting with children continues to inspire and energize Eppert as much as ever. “It is never a boring day at work; children keep you on your toes and always smiling! Connecting with families and helping to make their family life a little brighter is another huge blessing as a therapist. Consulting with schools at the curriculum level is not only rewarding, but essential to making an impact on the lives of many children at once,” she says. “I am grateful every day to be a graduate of WUOT and part of this amazing profession.”

The Program is grateful to Eppert for creating her door design and sharing its story during our Centennial celebration.
Student happenings

OT students in the Health Professional Student Leadership Council (HPSLC) volunteered at the Little Sisters of the Poor site as part of Community Service Day on Oct. 3.

Members of Pi Theta Epsilon dropped off hygiene kits for St. Patrick Center homeless clients on Nov. 6. The kits were created from donations in honor of World OT Day.

A client built shelves as part of an intervention for the Case Based Learning (CBL) course on Nov. 20. Each CBL group works with an individual for three sessions.

Students volunteered at Memory Care Home Solutions’ annual gala, Memories and Melodies, on Nov. 12. They helped with event set-up, and greeted and assisted guests with accessibility needs.
Range of motion

Koob Moua, OTD/S ’17, performs a manual muscle test and range of motion screening assessment during a Case Based Learning II live client event.
The Program in Occupational Therapy is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449. ACOTE's telephone number, c/o AOTA, is (301) 652-AOTA and its web address is www.acoteonline.org.