



Washington University in St. Louis

SCHOOL OF MEDICINE

Occupational Therapy

Fall 2015

O.T. Link



Rewiring the
brain to improve
**Rehabilitation
Outcomes**



Driving Lessons

Erin Sherman, MSOT/S'15, and Brian Goedde, OTD/S'16, test accessible vans at United Access during a lab activity in the Supporting Participation with Technology and Environmental Interventions class. Students learned about various modifications to increase accessibility to vehicles, including the addition of driving systems, mobility seats, wheelchair/scooter lifts, ramps, hand controls and other modifications.

O.T. Link Contents

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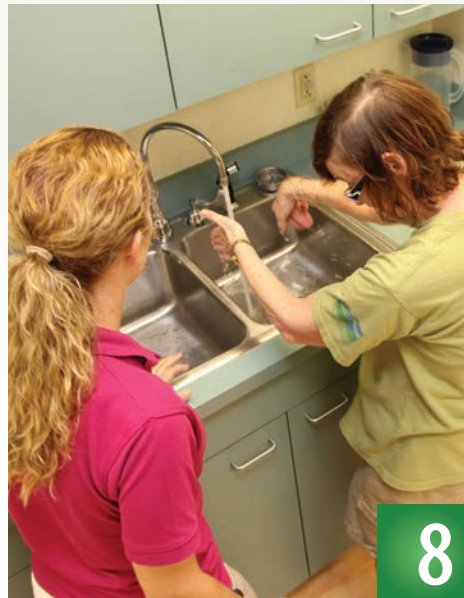
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Official publication of the Program in Occupational Therapy at Washington University School of Medicine

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 **Washington University in St. Louis**
 SCHOOL OF MEDICINE
 Occupational Therapy

From the Director



The Fall 2015 semester is full of new faces, spaces and places for the Program in Occupational Therapy as we continue to expand our research, clinical practice and curriculum experiences. In August, we welcomed 89 new students from more than 25 states to the Program. The diverse and talented class comprises 64 MSOT and 25 OTD students, 78 female and 11 male students, and five students from our 3-2 partner schools. Every year, I am so inspired by the energy and enthusiasm our incoming students bring to our Program and will one day bring to our profession as the next generation of clinical practitioners and researchers.

In July, we welcomed new faculty members **Scott Frey, PhD**, and **Benjamin Philip, PhD**, and their team of researchers and post-graduate students to the Program as well. The research of Dr. Frey's Rehabilitation Neuroscience Laboratory (page 4) focuses on pushing rehabilitative science breakthroughs into clinical practice and understanding the relationship between brain behavior, performance and participation. As head of our Rehabilitation and Participation Science (RAPS) PhD program, Dr. Frey's goal is to offer interdisciplinary training opportunities and develop a new generation of scientists capable of driving innovation in the field of rehabilitation through evidence-based research.

Our Community Practice continues to expand its services to help clients whose medical conditions are limiting their function in performing activities that are central to maintaining health or returning to family, work, and/or community life. Clinical Specialist **Jamie Archer, MSOT, OTR/L**, helped launch a new service line for patients with Huntington disease (HD) in collaboration with the Washington University Movement Disorders Center (page 8). Under the guidance of **Pat Nellis, MBA, OTR/L**, director of clinical operations, a student-run stroke clinic (page 10) relocated on the second floor of our building that was recently re-engineered to create a clinic for Community Practice (page 12). The clinic space is home to a large multipurpose room, fully-operational kitchen, two treatment rooms and an accessible bathroom scaled accordingly for real-world living.

Three students in the Program's Health and Disability Research Laboratory, led by **Alex Wong, PhD, DPhil, BSOT**, had a unique opportunity to travel to Hong Kong this past summer to participate in the Summer Overseas Exchange Subsidy Scheme (page 14). The week-long program is hosted by the Department of Rehabilitation Science at the Hong Kong Polytechnic University (PolyU) and gave the students an international OT lens to examine rehabilitation research, clinical practice and the issues that surround them.

I am always so grateful for the many ways your donations support the students in our Program and the future of the profession (page 16 and 17). As the Program approaches its 100th anniversary in 2018 (page 18), we encourage alumni participation in the celebration plans. Please visit our website at ot.wustl.edu/alumni and update your contact information with us so we can keep you informed as the Centennial approaches. Your involvement is very important to me because you represent our history and our future in the work you do each and every day in communities around the world.

Thank you for being a vital part of our Program and our mission to advance human health by enhancing people's participation in everyday life activities.

A handwritten signature in black ink that reads "Carolyn Baum". The signature is fluid and cursive, with a long horizontal stroke at the end.

Carolyn M. Baum, PhD, OTR, FAOTA

*Professor of Occupational Therapy, Neurology and Social Work
Elias Michael Executive Director,
Program in Occupational Therapy*

Kaskutas appointed assistant director of the post-professional occupational therapy doctoral program

Vicki Kaskutas, OTD, MHS, OTR/L, FAOTA, associate professor of occupational therapy and of medicine at the Program in Occupational Therapy at Washington University School of Medicine, has been appointed assistant director of the post-professional occupational therapy doctoral (PPOTD) degree program.

Kaskutas' responsibilities include the development and oversight of all elements of the PPOTD degree program, including recruiting, admissions, curriculum, instruction, program evaluation and student affairs. She continues to teach courses in the master's and doctoral curricula and is working with **Steve Taff, PhD, OTR/L**, associate director of professional education and academic affairs, to create processes, relationships and infrastructure to support new educational research and scholarship of teaching and learning initiatives.

"This is a new position created to meet the demand for the doctoral degree among currently practicing therapists," Taff says. "Dr. Kaskutas has a rare combination of clinical teaching and administrative

experience, which is ideal for this leadership position. She has her finger on the pulse of clinical practice and the creativity to develop innovative methods of delivering curriculum."

A graduate of the post-professional doctoral program in 2008, Kaskutas knows first-hand the difference doctoral training has made in her own career. "The post-professional degree exposes seasoned clinicians to contemporary issues in occupational therapy and improves their ability to use and develop evidence for our profession. The training can propel graduates into academic, administrative, research and policy-related roles," Kaskutas says.

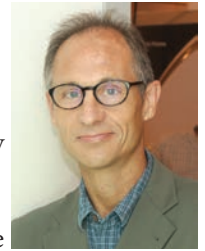
Kaskutas is seeking input from alums on what they would like to see incorporated into the PPOTD degree program moving forward. If you would like to be part of a focus group, or simply want to share your thoughts, please contact her at kaskutasv@wustl.edu.



Vicki Kaskutas

Frey named an associate director of the Program

Scott Frey, PhD, has been named an associate director of the Program in Occupational Therapy at Washington University School of Medicine and head of its Rehabilitation and Participation Science (RAPS) PhD program.



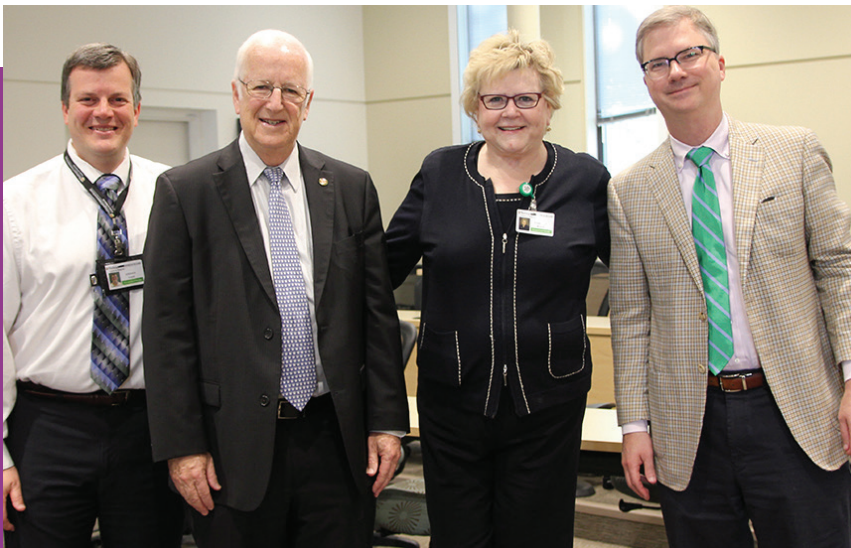
Scott Frey

Frey, a professor of occupational therapy and of neurology, comes to the School of Medicine from the University of Missouri-Columbia, where he directed the Brain Imaging Center and the Rehabilitation Neuroscience Lab and was the Miller Family Chair in Cognitive Neuroscience.

He began in his new position July 1.

His research focus is the neuroscience of sensorimotor action planning and control. This work has involved individuals with injuries to the brain or limbs, including amputees. Recent work with people who have received hand transplants demonstrates that recovery of function after limb injury has a lot to do with adaptations that occur in the brain's sensory and motor systems. Frey's current work explores ways of facilitating these adaptations to enhance recovery.

Frey earned a master's degree in human development from Harvard and a doctorate in experimental psychology from Cornell. He undertook postdoctoral training in cognitive neuroscience at the Geisel School of Medicine and the Center for Cognitive Neuroscience at Dartmouth before founding the Rehabilitation Neuroscience Lab at the University of Oregon and overseeing that university's Robert and Beverly Lewis Center for Neuroimaging.



Program receives 10-year accreditation

This spring, the Program in Occupational Therapy hosted representatives from the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA). During their visit, ACOTE representatives met with numerous faculty, partners and students to assess the Program's master's and doctoral degrees. The team presented its positive findings to Program leadership, faculty, clinicians and staff. Attending the report review were (pictured from left) Dr. Steve Taff, Dr. Larry Shapiro, executive vice chancellor for medical affairs and dean, Dr. Carolyn Baum, and Dr. Holden Thorp, provost and executive vice chancellor for Academic Affairs.

At its August 6-9, 2015 meeting, ACOTE reviewed the Report of On-Site Evaluation (ROSE) and voted to grant a Status of Accreditation to the Program for a period of 10 years. ACOTE currently accredits over 340 occupational therapy and occupational therapy assistant educational programs in the United States and its territories.

Want more Program news?

Stay up-to-date on the latest Program news by visiting our website at ot.wustl.edu or connecting with us on Facebook, LinkedIn, Twitter and Pinterest.



Rewiring the brain to improve Rehabilitation Outcomes

BY STEPHANIE STEMMLER

Researching brain plasticity to develop better rehabilitative care practices for clinicians



PhD student Pin-Wei (Benny) Chen (seated) with Scott Frey, PhD (left), and Benjamin Philip, PhD (right), in the Rehabilitation Neuroscience Laboratory.

Scott Frey, PhD, was just a young child when he first began to think about how science and rehabilitation melded together. “My mother had multiple sclerosis and I grew up going to therapy and neurology appointments with her,” he says. “That sparked an interest in science and biology and, ultimately (as Frey moved through college and graduate schools), to my current focus in cognitive neuroscience and neuro-rehabilitation. I wanted to see if there was some way, without a clinical background, that I could have an impact on the quality of care.”

His impact has become far-reaching. Frey conducts research that both informs and guides clinicians toward the development of better rehabilitative care practices for patients diagnosed with diseases or injuries to the brain, spinal cord or peripheral nerves. He has searched for these evidence-based rehabilitation strategies for more than two decades, with remarkable success. This summer, he joined the Program in Occupational Therapy, establishing the Rehabilitation Neuroscience Laboratory and bringing with him his team of researchers and post-graduate students focused on pushing rehabilitative science breakthroughs into clinical practice.

Carolyn M. Baum, PhD, OTR, FAOTA, the Elias Michael Executive Director of the Program in Occupational Therapy, enticed Frey to Washington University. “Dr. Frey’s lab has been asking the questions that are important in understanding rehabilitation

approaches for years,” she says. “Our profession’s first major paper, ‘The Philosophy of Occupation Therapy,’ was written by a neurobiologist (Adolf Meyer, MD) who told us it is the use we make of our bodies that influences our every organ. That statement has always prompted the

“We found that areas of the brain that were previously used for motor and sensory functions of the amputated hand had actually re-targeted their functions to help compensate for the brain loss on the non-dominant side.” — Scott Frey, PhD

questions of ‘why’ and ‘how’ that we ask in the profession. If we as OTs understand the relationship between brain behavior, performance and participation, we will give more understanding to the rehabilitation sciences and to those trying to understand how the brain works.”

Early hints at the plasticity of the brain to rewire itself and the potential impact of neuro-rehabilitative techniques came in the 1980s, when researchers began to find evidence that a mature brain could restore some loss of function in patients recovering from stroke or epilepsy. Frey, who was awarded one of the first cognitive rehabilitation grants from the James S. McDonnell Foundation while at Dartmouth College, initially worked with patients who had intractable epilepsy. He studied how the brain rearranged

signaling and function following split-brain surgical procedures in which the brain’s two hemispheres are separated so that seizure activity doesn’t “jump” from one side of the brain to the other. He then turned his attention to individuals who had experienced strokes or amputations.

“One of our recent aha moments came when we discovered during brain imaging studies that areas of the brain devoted to a hand that was lost through amputation start to respond to the other remaining hand,” Frey says. “In other words, we found that areas of the brain that were previously used for motor and sensory functions of the amputated hand had actually re-targeted their functions to help compensate for the brain loss on the non-dominant side. That is tremendously important because we see evidence for similar plasticity and brain reorganization in patients with stroke who have damage on one side of the brain.”

Amazingly, not only can the brain rewire itself, it seems it can continue to do so long after an injury has occurred. In previous research, Frey and his colleagues evaluated

In addition to his leadership of the Rehabilitation Neuroscience Laboratory, Frey also chairs the Program’s new Rehabilitation and Participation Sciences (RAPS) PhD degree program. His goal is to offer interdisciplinary training opportunities and develop a new generation of scientists capable of driving innovation in the field of rehabilitation through evidence-based research.

Right, Frey discusses how the laboratory will utilize the PIXAR magnetic resonance imaging (MRI) machine in their research studies with PhD student Rachael Wagner.



a 54-year-old man who had lost his hand 35 years prior and then underwent a hand transplant. Functional MRI studies found that with targeted rehabilitation, the man's brain reorganized its own sensory signaling pathways to adapt to the transplanted hand.

"One of the key ideas in neuro-rehabilitation is that the brain can adapt to stimulation and reorganize itself to restore function," he explains. "Our research found that this rewiring of the brain can occur even years after a traumatic injury, which points to the critical impact that neuro-rehabilitation can have on both early and long-term outcomes."

His research has peaked the interest of the U.S. Department of Defense (DoD) due to the rising number of war-related injuries and amputations. In addition to a large grant from the National Institutes of Health

(NIH), Frey was awarded two grants from the DoD and the U.S. Army to further examine the role of cortical plasticity in patients with hand amputations.

"It's like looking at the inner workings of a clock," Frey says of his translational research projects. "We need to understand the gears, springs, and how it winds. It's the same with the brain. We can take advantage of how the brain reprocesses information and changes signaling to improve how we develop rehabilitative approaches."

Frey now is taking his earlier findings and applying them to patients with peripheral nerve injuries. He is planning collaborations with Susan Mackinnon, MD, chief of Division of Plastic and Reconstructive Surgery, and her team, who specialize in nerve transplantation. Recently, Mackinnon performed the world's first donor nerve transplant. "Many of their patients have severed nerves of the forearm or hand, which cuts off the nerve signaling to the brain," says Frey.

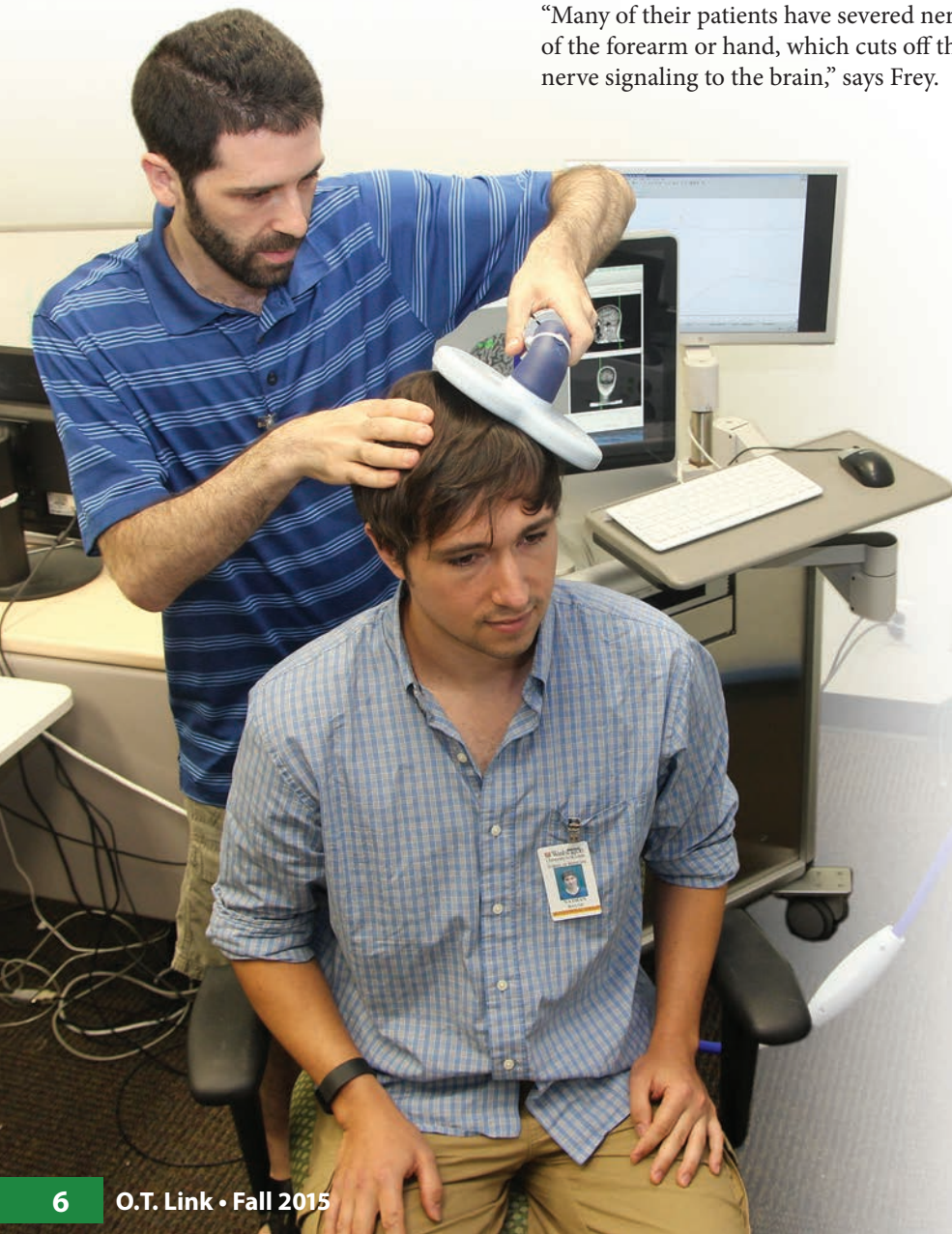
"When the severed nerves are repaired or when there are donor nerves, can we take the techniques that target plasticity in the brain (such as neurostimulation) and facilitate recovery in these peripheral nerve injury patients, too? I think we can."

The confluence of neuroscience and rehabilitation on the campus is what drew Frey to the Program in Occupational Therapy and to Washington University. In addition to his leadership of the Rehabilitation Neuroscience Laboratory, Frey also chairs the Program's new Rehabilitation and Participation Sciences (RAPS) PhD degree program. His goal is to offer interdisciplinary training opportunities and develop a new generation of scientists capable of driving innovation in the field of rehabilitation through evidence-based research.

Nathan Baune is one of the PhD students who followed Frey from the University of Missouri-Columbia to Washington University to work in the Rehabilitation Neuroscience Laboratory. As part of his role, Baune is trying to pinpoint the brain mechanisms involved in controlling hand functions during fine motor skills. "The advantage of being at Washington University is that we can work closely with physicians, rehabilitation specialists and occupational therapists," he says. "We also are working with imaging specialists at Mallinckrodt Institute of Radiology who are pioneers in neuroimaging techniques. It's that integration of resources and expertise that will enable us not only to advance our research agenda, but also to more rapidly translate our findings into clinical practice."

Adds Frey, "In watching how my mother was cared for before she passed away, I realized that the important thing was not doing something based solely upon intuition, but on actual evidence, on finding out the 'why' and then the 'how' behind effective rehabilitation strategies," he says. "If we can continue to identify better neuro-rehabilitative practices, we can influence and improve the quality of life for many, many patients in the years to come."

PhD student Nathan Baune (seated) helps Benjamin Philip, PhD, instructor in occupational therapy and neurology, test equipment in the Rehabilitation Neuroscience Laboratory.





Imaging the Brain

Members of the Rehabilitation Neuroscience Laboratory at the Mallinckrodt Institute of Radiology (MIR). Committed to its educational, research and patient care missions, MIR supports a variety of basic and applied research initiatives throughout the School of Medicine.

In October, Jamie Archer, MSOT, OTR/L will celebrate her one-year anniversary with the Program in Occupational Therapy's Community Practice. Although she's a relatively new face on the team, Archer has become the go-to resource for the physicians, staff and patients at the Movement Disorders Center, where she has launched and grown an OT service line for patients with Huntington disease (HD).

Archer was specifically recruited to fill this role by **Pat Nellis, MBA, OTR/L**, director of clinical operations, after being approached by Joel Perlmutter, MD, and Stacey Barton, MSW, from the HDSA Center of Excellence located within the Movement Disorders Center. The Center had recently received a grant from the Huntington's Disease Society of America (HDSA), which stipulated that more services such as PT or OT be provided within the clinic. Upon discussing ways to enhance the clinic activities and meet the requirements of the grant, they decided to approach Nellis about a collaboration with OT. "The partnership was well received by Pat Nellis and the OT program, and we were thrilled," shares Barton. "OT is a good fit because these families are struggling with a progressive neurological condition which impacts independence and function very early in the course of the disease, and we knew that OT was uniquely capable of improving the lives of these patients and their caregivers."

Prior to her arrival on the Community Practice team, Archer worked at Barnes-Jewish Hospital as an OT in acute care, where she gained extensive experience in neurology and program development. This experience provided the perfect skill set for her to use in developing this new partnership and service line.

Positioning OT in a primary care model

Archer's first step in implementing the program was to dive into research on OT's role in primary care. "The literature very strongly supported getting in with the team, learning their flow and how they operate, and then taking every opportunity available to educate about OT, and that was the strongest message for me," shares Archer. She spent time meeting with different members of the clinic team and observing and educating the physicians to best determine how OT could fit into the existing process. "In our approach to integrate OT, we tried to make the least work possible for the physicians because

Jamie Archer, MSOT, OTR/L, evaluates a client at the Movement Disorders Center.



The OT can see you now

Delivering multidisciplinary care and a refined patient experience by integrating occupational therapy into the physician's office

BY KARA OVERTON

Archer visits with a client to assess her level of comfort with IADLs in order to develop recommendations for a plan of care and client-centered goals for therapy.



we assumed the likelihood of them making any changes in their practice would be greater,” says Archer. “We analyzed the existing MD assessment and were able to highlight indicators for OT in their current assessment to avoid the need for additional components.”

After developing an outline, Archer presented her findings and implemented a pilot program requiring significant coordination of schedules between the groups and orchestration of patient flows within the clinic. Archer designates one day each week in the center to evaluate clients who elect to see her for OT during their regular visit, where they will either see her before or after the appointment with their physician. And sometimes, shares Archer, her time spent with the client is broken up so she sees them both before and after

verbal recommendation to each team member and discuss patient cases when needed,” says Archer. “This also makes the entire visit more transparent for the patient.”

Shaping the patient experience

One of the largest benefits to patients is that this streamlined process provides them with the opportunity to see multiple members of a specialty team in one visit instead of traveling to multiple appointments in different locations. This is especially true for those patients who travel a large distance for their appointment. “This has been very well received by patients and families,” shares Barton. “Because of the nature of the disease, patients are not always aware of the extent of their deficits so sometimes

“OT is a good fit because these families are struggling with a progressive neurological condition which impacts independence and function very early in the course of the disease, and we knew that OT was uniquely capable of improving the lives of these patients and their caregivers.”

— Stacey Barton, MSW

their visit with the physician. “It’s totally dependent upon the flow of the clinic that day,” she says. “Although this seems fairly simple, it has been a long process of trial and error to see what worked best for everyone on the team and more importantly, the patients. This is very much a team effort and the process is dependent on each person involved. We have a great team who all work hard each week to make it possible to offer OT to our clients.” Although it requires significant time, attention to detail and flexibility, the end results provides a much better experience for the patients and families. “The collaboration of care is much stronger since we are all able to provide a direct

they don’t know what help they could use. I think a lot of patients were unfamiliar with OT before but once they understand the role, they almost always see benefit in it.”

The physicians also appreciate the comprehensiveness of the model, adds Barton. “Our physicians are very supportive of OT interventions and I think the main benefit is that we can provide patients with another lifeline to better quality of life by referring them to Jamie. When we made external (OT) referrals before, we never knew what the quality of care would be.”

For Perlmutter, MD, who is also the Elliot Stein Family Professor of Neurology, it’s an

opportunity to leverage the strengths an OT can offer for his patients. “Huntington disease causes relentless progressive cognitive impairment, motor dysfunction and changes in personality. Each of these domains leads to substantial difficulties in activities of daily living and interacting with all components of the environment including work space, home and personal interactions. Occupational therapy can play a vital role in helping devise and implement adaptive strategies for HD patients and families to maximize function and independence. We rely upon the skills and understanding of our OT colleagues to address these needs and help our patients and families cope with their challenges.”

Performance improvements and next steps

Overall, the program is continuing to develop, shares Archer. “After several modifications over the last 6-8 months, our program is continuing to evolve each week. I meet regularly with various members of the team to discuss barriers as well as to identify what is working well. My goal is to continue this follow-up so that we are able to make improvements and update the program over time in conjunction with other systematic changes.”

The Movement Disorders Center also works with patients and families affected by a variety of other disorders that similarly impair movement and cognitive capacity, such as Parkinson disease (PD). The team’s new focus is to establish a similar model for clients with PD that offers the same in-clinic service.

“Jamie has really jumped into this in ways beyond what we originally imagined,” adds Barton. “She attends our support groups (and was a recent speaker), she joined the local HDSA Chapter’s Board of Directors and is helping me plan a patient educational conference to be held in St. Louis in March. She has worked very hard to become an expert and this absolutely matters!”

Since its launch in November, the volume of referrals for movement disorders has grown rapidly, and it continues to be the largest volume of business for Community Practice. Detailed information about the service line can be found on the Community Practice’s website.

Innovations *in* stroke care

BY KARA OVERTON

Mackenzie Schaefer, MSOT/S '16,
tests a client's strength in the
OT student stroke clinic.



Creating a sustainable model for the student stroke clinic

Following a few changes made during the summer break, the student-run stroke clinic, launched late last year, has more than just a new home beginning this semester; it also has a stronger operational foundation within the Program. Now housed in the new Community Practice clinic located on the second floor of the 4444 Forest Park Avenue building, and under new leadership oversight, the stroke clinic offers a unique opportunity for students to gain hands-on experience in a real-world environment, extending beyond the role that fieldwork plays in preparing students for practice.

Planning for the clinic began two years ago when OTD students Kerry Ball, OTD/S '16, Brian Goedde, OTD/S '16, and Sadie Walker, OTD/S '16, developed the initial business plan for their OTD project. Former faculty member Rebecca Birkenmeier, OTD, OTR/L, served as mentor of the project for the first two years, until she left the Program late last summer. "Our goal was to build the clinic into not only what Dr. Birkenmeier initially envisioned, but also a place for students to hone their clinical skills and prepare for their respective fieldworks," shares Goedde. The students divided the work, each taking responsibility for a specific piece of the plan. Goedde focused on the infrastructure for the clinic, including funding and marketing; Walker directed her efforts toward integrating their proposal into the curriculum so that it would create a sustainable model year-after-year; and Ball developed an evidence-based, standardized assessment battery and protocol for the clinic. According to Walker, collaboration has been the key to success throughout the planning. "Although we have 'separate' projects, we really work together and collaborate about each other's piece as well, because it all has to fit together in the final product."

Following Birkenmeier's departure, the students transitioned to working with **Pat Nellis, MBA, OTR/L**, director of clinical operations, to establish a solid framework for continued growth and development. In addition to Nellis, **Alex Wong, PhD, DPhil, BSOT**, and **Meghan Doherty, MSOT, OTR/L**, will also serve as mentors for the third-year OTD students, each bringing their expertise to the planning table. "There is not enough praise I can offer for what Pat Nellis has done for

us and this clinic," says Goedde. "She has been an enormous resource in our doctoral projects and the upbringing of the clinic, and is an essential piece in this venture."

The clinic serves as a resource for clients who have suffered a stroke, and are either uninsured or underinsured. In its current

"This is a great opportunity for the students to get a real sense of what practice is like. It gives them the chance to explore all aspects of creating a successful business model, from determining what evidence and interventions to use, to what type of space is needed, to marketing the program, and tracking measures and outcomes."

— Pat Nellis, MBA, OTR/L

structure, clinic hours will be offered on Monday mornings for a period of 10 weeks during the fall semester. One-on-one care will be provided for each client by the second-year students, who will assess and treat clients with oversight from the third-year students, as well as a licensed therapist, during each session. Moving forward, however, the students have bigger ideas and goals. "We want to be able to take clients every day of the week throughout the day," shares Walker. "We would like to see mandatory student participation so that they get that experience and provide free services to those in need."

"This is a great opportunity for the students to get a real sense of what practice is like," shares Nellis. "It gives them the chance to explore all aspects of creating a successful business model, from determining what evidence and interventions to use, to what type of space is needed, to marketing the program, and tracking measures and outcomes. Helping mentor students and mold the next generation of clinicians is a passion of mine, so I'm thrilled to be a part of this program."

Walker appreciates the real-world learning experience this opportunity has provided. "It is great to see that we are making real change in clients' lives and that we get to learn so much just by the clinical experience piece. I am really interested in leadership and program development, so I have learned a ton about what goes into proposing such a project and how to make sure that our model is sustainable."

Each semester, the program will continue to evolve, giving the students a glimpse into the dynamics of practice and the opportunity to gain real-world experience. "I am so appreciative of the management skills I've gained through this experience," shares Goedde. "I would not have this opportunity anywhere else. This is a painstaking process and it provides me with a skill set that I can take into my career and use to propel me into greater opportunities."





Above: Jamie Archer, MSOT, OTR/L, retrieves adaptive equipment from the newly-finished storage area in the Community Practice clinic.

Left: Pat Nellis, MBA, OTR/L, selects the artwork for the clinic walls, using photos celebrating OT over the years.

Blending form & function

BY KARA OVERTON

Creating an environment well-designed for clinical excellence

Following a four-month renovation, space on the second floor of the 4444 Forest Park Avenue building was recently re-engineered to create a clinic for Community Practice. The new clinic is designed to treat clients of all ages and is home to a large multipurpose room, fully-operational kitchen, two treatment rooms and an accessible bathroom scaled accordingly for real-world living. It also features functional work and storage space for team members, and a casual waiting area for families and guests.

“Creating a clinic space for Community Practice will help us in our continued growth and development goals,” shares Pat Nellis, MBA, OTR/L, director of clinical operations. “The space was designed to function in a variety of ways so that we can more effectively impact the communities we serve. In addition to our practice-related goals, the clinic

also provides our students access to adequate clinical space for their training and development. Whether it’s used for assessing a client’s ability to work independently, trialing an intervention, or functioning as the student stroke clinic, this space is flexible enough to adapt to our Program’s diverse initiatives and needs,” adds Nellis.

Although the new clinic is a much-anticipated resource for the team, the initial intent and purpose of Community Practice remains the same. “We will still be a community-based clinic,” says Nellis. “We will continue to provide therapeutic services where they are needed most, including a client’s home, school or work place as appropriate. Having an on-site clinic will allow us to work more efficiently, and offer us an additional option for our clients and families, but ultimately, OT is best delivered in a client’s

actual environment. That’s one of the differentiators of our services, and is still very much the cornerstone of our practice.”

The clinic officially opened on Monday, Sept. 28 with the launch of the student-run stroke clinic for the fall semester. Plans are underway to publicly unveil the new space at an open house scheduled later this fall. The Rehabilitation Neuroscience Laboratory (RNL), led by new faculty member Scott Frey, PhD, will also be showcased at the event, which includes tours of the new spaces to faculty, staff, physicians and friends of the Program.

For more information about the new clinic and upcoming Program events, visit ot.wustl.edu.

Ready to expand your OT knowledgebase?

Join us for a continuing education course in 2016.

Evidenced by our commitment to excellence through research, innovation, and extraordinary clinical care, the Program in Occupational Therapy promotes an atmosphere of lifelong learning for students, team members, clients, and community providers. As one of the leading occupational therapy programs in the country, our faculty and team members are dedicated to staying abreast of the latest developments and advances in occupational therapy and the science behind it, and are committed to sharing their expertise and experience with others through the continuing education program.

Our professional programming brings together learning across multiple disciplines to help participants strengthen their toolbox, as well as equips them to best care for clients and families amid a constantly evolving health care landscape.



The Program in Occupational Therapy at Washington University in St. Louis is an AOTA Approved Provider of continuing education. The assignment of AOTA CEUs does not imply endorsement of specific course content, products, or clinical procedures by AOTA.

2016 Continuing Education Schedule

Saturday, January 9

Assistive technology in 2016

Friday, February 26

Pediatric self-regulation

Friday, March 11

Using outcomes to improve practice

Friday, June 3

Cognition in Parkinson Disease and movement disorder patients

Friday, October 21

OT considerations for return to work

Visit ot.wustl.edu for more information.

APP



**APPROVED PROVIDER of
CONTINUING EDUCATION**

by The American Occupational
Therapy Association, Inc.



Berrit Goodman, MSOT/MPH/S '17, Tabitha McManus, MSOT/S '16, and Megan Matthew, MSOT/MPH/S '17, at Hong Kong Polytechnic University (PolyU).

Overseas exchange

BY MICHELE BERHORST

Students explore cutting-edge research in China

Three students from the Program in Occupational Therapy traveled to Hong Kong in June 2015 to participate in the Summer Overseas Exchange Subsidy Scheme (SOESS).

The week-long program is hosted by the Department of Rehabilitation Science at the Hong Kong Polytechnic University (PolyU), the only university in Hong Kong and the Chinese Mainland to provide tertiary education and training for both occupational and physical therapists.

Berrit Goodman, MSOT/MPH/S '17, Tabitha McManus, MSOT/S '16, and Megan Matthew, MSOT/MPH/S '17, are students in the Program's Health and Disability Research Laboratory, led by **Alex Wong, PhD, DPhil, BSOT**. Wong earned his bachelor of science in occupational therapy in 2001 and his doctorate of philosophy in rehabilitation science

(cognitive neuroscience concentration) in 2007 from PolyU before he received further training in community health and health services research from University of Illinois and Northwestern University.

"There are specific projects the students are working on in my lab that directly related to the SOESS seminars topics. I knew they would benefit from being exposed to the cutting-edge rehabilitation and neuroscience research at PolyU through the lectures, seminars and laboratory experiences the program offers," Wong says. "I contacted my research collaborator and mentor, Chetwyn Chan, PhD, to let him know three of my students were selected."

Following the 20-hour flight from St. Louis to Hong Kong, the students arrived at the dormitory at PolyU where they stayed for the week. Thirty occupational therapy (OT) and physical therapy (PT) students from eight countries were chosen for the 2015 SOESS, which is offered every other year.

"Our first full day consisted of a welcome reception to meet other students, a campus tour featuring student poster presentations on innovative design solutions, a Dim Sum lunch and an 'East Meets West' seminar focusing on the strengths of eastern and western rehabilitation approaches," Matthew says.

One of the seminar presentations the students found both interesting and relevant to their research was on how Eastern exercises can impact stress management in the workplace by Hector Tsang, PhD, OTR. McManus' research project focuses on the health benefits of mindfulness exercises, such as Yoga, Tai Chi and Qui Gong, on neurological conditions or elderly with cognitive-motor declines. "These exercises are accessible to this population and can help with fall prevention through increased balance and mind-body awareness. The participants are able to follow the simple movements even

if they have never participated in any other kind of exercise before,” McManus explains.

Goodman and Matthew, who are pursuing the new Master of Science in Occupational Therapy (MSOT)/Master of Public Health (MPH) joint degree, are working on projects centered on health promotion and wellness in adolescence and young adults with chronic diseases. “Mindfulness exercises are low risk, help with pain management but don’t overthrow cardiac function that put our patients at risk. Another seminar focused on mind-body exercise solutions to help with gait and balance disorders in older adults,” Goodman says. “Along with these physical benefits, our group also likes to test the cognitive and mental health benefits; if so, why?” Wong adds.

The topic of the second day was neuroscience and neurological rehabilitation, and included sessions on virtual reality, transcutaneous electrical nerve stimulation (TENS), the Montreal Cognitive Assessment (MoCA) and current medical information and technology (CMIT). The students were familiar with these topics from the Program’s curriculum, but enjoyed hearing the international perspectives from the other students and professors. The students also explored laboratories engaged in research for stroke rehabilitation using the Sensory Cueing Wristwatch (developed at PolyU), prism glasses and dual-tasking for individuals with stroke.

“We found it exciting to not only get a glimpse at some of the ongoing research at PolyU, but to have hands-on experiences as well. For example, we tried Tai Chi for the first time using an instructional video and tested the Sensory Cueing Wristwatch on ourselves,” Goodman says. “There was also a group activity where OT and PT students collaborated to present ideas of what makes a skilled researcher in health science professions.”

The next two days consisted of a final set of seminars focused on orthopedic and sports rehabilitation, and a visit to several different clinical settings around Hong Kong. The students visited B.M. Kotewall Memorial, the Pak Tin Pre-school Centre and the Sahk LOHAS Garden to learn in “real-life contexts.” Each site was client-centered with trans-disciplinary

teams of health specialists collaborating together in one environment. They also visited the House of Innovation (HOI) at PolyU, which features a technology showroom of the University’s research and development accomplishments. Here, the students learned about innovations such as a radiation-free, 3D system for scoliosis evaluation, a functional electrical stimulation (FES)-robot hybrid system for upper limb rehabilitation, and a virtual reality (VR)-based community living skills training program.

On the last day of the program, each student had an individual consultation with the professors of their choice. “This was very helpful as we received ample feedback and ideas on our current research interests and general advice on clinical practice,” McManus says.

Before the SOESS group headed home, they did some site seeing including popular tourist locations such as the Clock Tower,



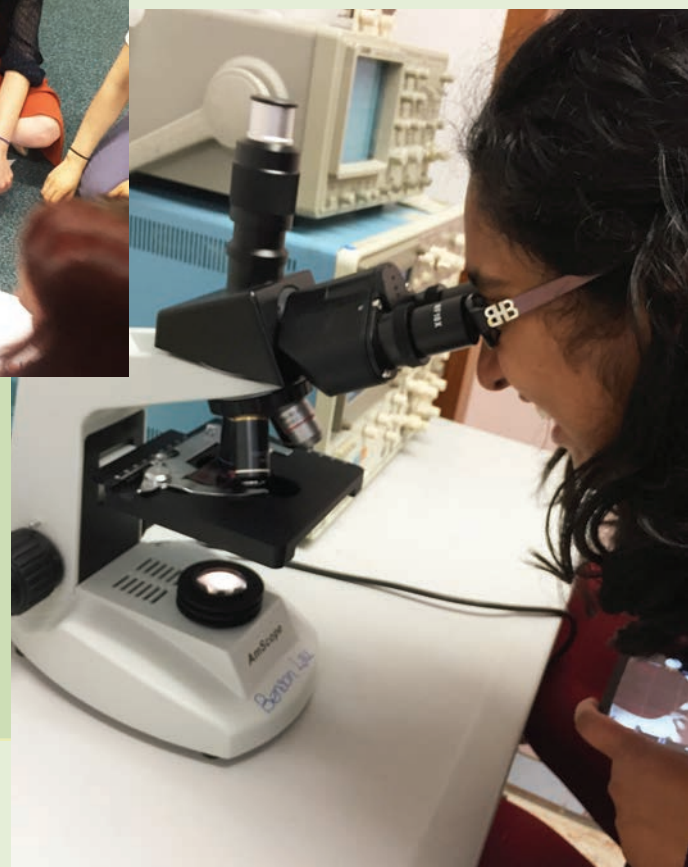
Goodman (top, right) collaborates with other SOESS students to brainstorm ideas of what makes a skilled researcher. Matthew (right) examines cells through a microscope in the neuro-rehabilitation laboratory.

Man Mo Temple, Repulse Bay, Victoria Peak, and a memorable trip up Sky100, the highest tower in Hong Kong.

Looking back on the trip as future occupational therapists, the students felt it was an incredible, valuable learning experience they will never forget.

“The experiences I had demonstrated how much impact research can have in a clinical setting. Research drives what we do as occupational therapists because it filters to community level,” Matthew says. “I was looking at cells through a microscope; learning about neuroscience and rehabilitation on a whole new level. This experience has changed the way I will practice and research in the future.”

“We learned about health care, research and clinical practice from leading professionals in the field, and had the opportunity to explore one of the world’s most exciting cities,” Goodman adds. “The entire SOESS group was able to interact and exchange views with each other as therapists from a variety of different countries. We will always have that international perspective – no matter where we are and who we are helping in the community.”



Scholarships: Empowering those with a vision to empower others

BY MICHELE BERHORST



Cory Sessions with the picnic table in 2006

Cory Sessions, OTD/S '18, has always been sensitive to the needs of people with disabilities. In middle school, his physical education class was joined with another class for students with special needs. "It was a great experience being with and learning from those kids. I felt comfortable around them and had fun in class," Sessions remembers.

Sessions had similar experiences and interactions with people with disabilities throughout high school, which heightened his awareness of community accessibility. For his Eagle Scout service project, he decided to build a picnic table for a local park in his hometown of Clayton, California. "At the time, I knew nothing about woodworking or welding, but wanted to learn while demonstrating leadership to my troop," Sessions says. "I talked the project idea over with my dad, who worked in local government. He suggested I make the picnic table ADA compliant, and I knew immediately that was what I was going to do."

Sessions did the research, fundraising, planning and development needed to make the accessible picnic table a reality. "I found the compliance specifications online and designed the table so it would match the others ones in the park. I presented my

project to the Boy Scouts of America and the necessary county offices and it was approved. Together with my troop, we built and installed the picnic table as planned."



Cory Sessions

At the time, Sessions wasn't familiar with occupational therapy (OT). As an undergraduate student at Brigham Young University in Idaho, he learned about the profession through volunteering. Those experiences landed Sessions a job with a local developmental disability agency. He helped clients achieve their activity-based goals in the community such as shopping or using the public library.

"Through the agency, I met a speech and language pathologist and shadowed her a couple times at her clinic. There, I met an occupational therapist and she helped me get a pediatric OT internship," Sessions says. "My undergrad is in sociology, which studies how society as a whole affects the individual. Occupational therapy looks at how accessible that society is. All my life, I've had these experiences with people who want to participate in their communities. As a clinical doctoral student, I am learning how occupational therapy can facilitate that participation."

Receiving a scholarship helped Sessions decide on Washington University School of Medicine. "This was the only graduate school that offered me a scholarship, and I am thankful for the opportunities it has given me," he says. "I'm looking forward to developing my clinical and research skills while I'm here."

Your donation to the Program in Occupational Therapy Scholarship Fund helps support future occupational therapists to impact the communities in which 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:

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

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

If you have any questions about Occupational Therapy Scholarship Fund, please contact Ashley Snyder in Medical Alumni and Development at 314-935-9686 or asnyder@wustl.edu.

Investing in the future of occupational therapy

Sven Eliasson, MD, PhD, has been a friend and supporter of the Program in Occupational Therapy and the profession since he came to Washington University in 1964 as an associate professor of neurology.

During his long and esteemed career in medicine, Eliasson took a holistic approach to healing and spent a great deal of time talking and listening to his patients to find out what they did each day, what their lives were like and what type of relationships they had with the important people in their lives. Understanding the meaning people attached to the activities of daily life in relation to their physical and emotional well-being helped Eliasson better diagnose and treat his patients. He had a strong belief in rehabilitating individuals so that they could resume their lives and work – their occupations – as quickly as possible following a sickness or an accident. He became an advocate of rehabilitation, and staunchly defended and actively promoted occupational and physical therapy. It was Eliasson who fought hard to keep the Program in Occupational Therapy when its closing seemed imminent in the 1980s.

“At that point in our history, we had very few people trained as scientists in the occupational therapy (OT) profession. Dr. Eliasson knew that was the direction our profession needed to move in. He wanted us to learn how to ask questions, drive hypotheses, organize our work and think/act like scientists,” explains **Carolyn M. Baum, PhD, OTR, FAOTA.**

During the 1980s, Baum was the director of the Occupational Therapy Clinical Service at the Irene Walter Johnson Institute of Rehabilitation at Washington University School of Medicine. She and Eliasson had been colleagues for many years so when

Sven Eliasson, MD, PhD, was a professor of neurology at Washington University and the associate medical director of the Irene Walter Johnson Institute for Rehabilitation in the 1980s.

the Program was searching for an executive director in 1988, Eliasson encouraged her to apply.

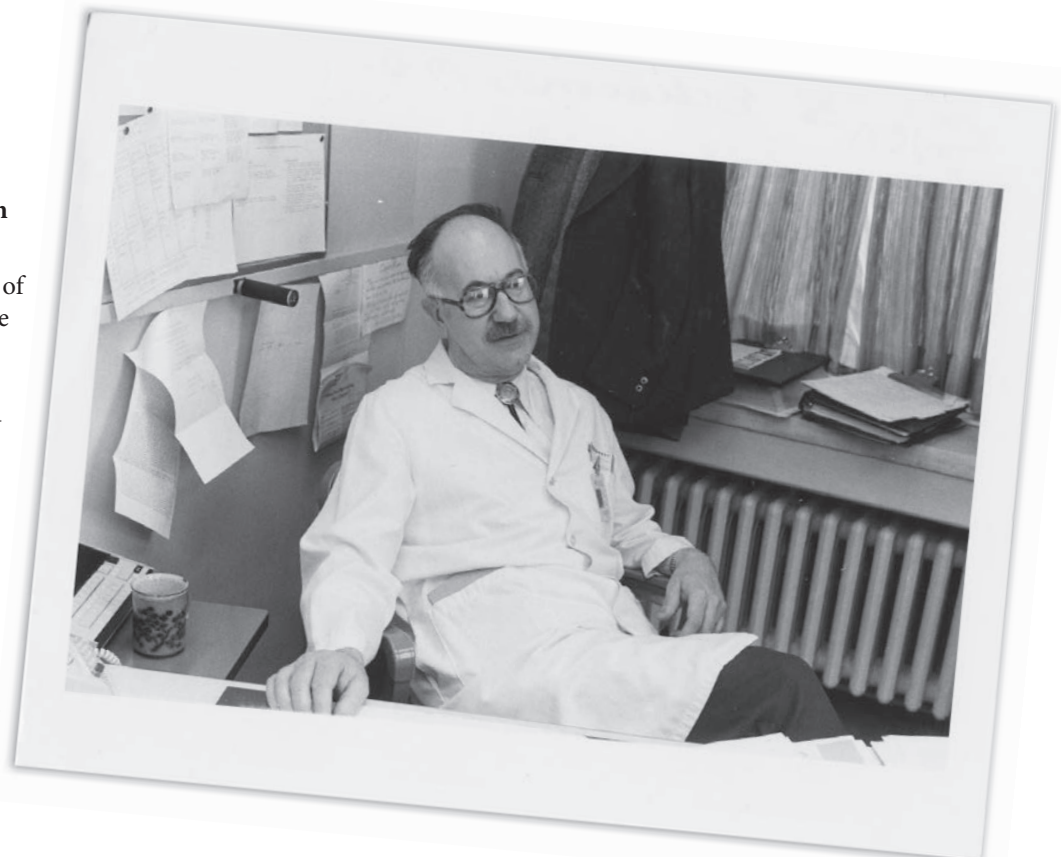
“He knew I had the drive and the passion to save this Program, and that I understood the need to incorporate science into our work and our curriculum,” Baum says. “He encouraged and supported me and the Program during that difficult time, and helped us become what we are today.”

“Right from the start, Dr. Baum started modernizing the teaching methods, the topics that were addressed in the classroom and explored what rehabilitation needs were in the community. Since she was already connected with a number of neurologists and orthopedists, Dr. Baum encouraged research collaboration, knowing it would eventually affect clinical measurement and approaches,” Eliasson says. “There was – and still is – a strong push for interdisciplinary collaboration because occupational therapists are a vital part of the health care system. I knew the value of OT during the course of my own career; that is why I was a proponent of it for back in the 1960s and still am today.”

Eliasson retired from Washington University School of Medicine in 1992. He has been a donor and a William Greenleaf Eliot Society member for many years. Eliot Society members are leaders in supporting the Annual Fund, which provides the university’s critical margin of excellence in its mission of teaching, research and service to community and society. Eliot Society members can specify which programs or departments their donations support. Eliasson is proud to invest in the future of occupational therapy.

“The techniques of OT are applicable in every facet of life, especially as we age. We all want to live longer and live quality lives in our homes and in our community,” Eliasson says. “I especially encourage anyone in medical professions to support OT because, by advancing rehabilitation science forward, the whole of community health will be improved.”

If you are interested in joining the William Greenleaf Eliot Society and learning about its many benefits, please contact Ashley Snyder in Medical Alumni and Development at 314-935-9686 or asnyder@wustl.edu.



Be a Centennial class ambassador!

The Program in Occupational Therapy will be celebrating its 100th anniversary in 2018. Celebration plans are well underway, and a major component of those plans involves alumni participation.

For each decade, we would like to have at least two class ambassadors to represent the students and the profession during those times. Class ambassadors will be listed on the various materials that will be sent out to encourage Centennial event attendance. We would also like to schedule a time with each ambassador to conduct an oral history interview to help us capture the spirit of your shared experience as a student.

When asked if she would become a class ambassador, **Lisa Pazak Avery, BSOT '87**, enthusiastically volunteered and encourages others to do as well.

“Celebrating the Centennial of the Program in Occupational Therapy gives alums the

unique opportunity to revisit the most meaningful aspects of our OT educations,” says Avery. “We can remember the ideals and aspirations we had as budding therapists, relive those academic moments that helped shape us as the healers and re-energize us as we explore the new and exciting dimensions that Washington University School of Medicine is cultivating in occupational therapy today. At this empty nesting stage of my life, I am especially excited to connect with past classmates and clinicians with whom I’ve connected with throughout the years.”

If you are interested in becoming a class ambassador, or helping with the celebration plans, please contact Rebecca Clendenen at clendenenr@wusm.wustl.edu.



Did you know?

Originally named the **St. Louis School for Reconstructive Aids in 1918**, the school was located in the **St. Louis School of Fine Arts on the main campus of Washington University and was incorporated by the State of Missouri as a philanthropic organization.**



Back to school

The Washington University Occupational Therapy Class of 1965 celebrated their 50th reunion this past May. Four alumnae – Bernie Krutchik, Melanie Warfield, Vi Pope and Judy Taft – returned to the medical school campus. The alumnae attended the Program in Occupational Therapy Open House on May 14, the day before Commencement. They enjoyed a tour, meeting the faculty and students, and visiting with Program Director Carolyn Baum, PhD, OTR, FAOTA.

After the Open House, the alumnae traveled to the Danforth campus to take part in the 50th Reunion Medallion Ceremony and Reception. They were invited to participate in the university Commencement affairs on Friday, May 15, and to join the procession at the Program’s Commencement at Graham Chapel.



Dr. Baum presenting the memoir to Gray's wife, Margaret "Marge" Gray

David Gray, PhD Memorial Symposium and Scholarship

On Friday, May 22, more than 150 colleagues, students, alumni, friends and family members gathered to celebrate **David Gray, PhD**, and his contributions to community participation throughout his career.

Held in the Eric P. Newman Education Center on the Medical Campus, the event provided us with a wonderful opportunity to reconnect with many of the Gray lab students from over the years, and celebrate a lifetime of achievements. Throughout the event, keynote speakers shared stories and memories of their work with Gray, each representative of a unique time and focal point of Gray's distinguished career. At the event, the Program presented a copy of his completed memoir written earlier this year to the Gray family. Two copies of the book will reside in the OT resource library and will be available for checkout by students, faculty and staff. To request a pdf of the book, please contact us at wuotinfo@wusm.wustl.edu.

Additionally, **Carolyn Baum, PhD, OTR, FAOTA**, announced the Program's intention to create a scholarship in Dr. Gray's name. The fund is intended to carry on Gray's passion for community participation and honor his legacy of excellence. To learn more about the scholarship, or to make a contribution, please call us at (314) 286-1600.

Smith appointed associate vice president for program development at Keuka College

Vicki Smith, EdD, OTR/L, FAOTA, was appointed associate vice president for program development at Keuka College in Keuka Park, NY, in July 2015. Smith has been a professor and chair of occupational therapy at Keuka since August 2002. She earned her bachelor's degree in occupational therapy from Washington University in 1986, an MBA from Gannon University, and a Doctor of Education degree from the University of Tennessee, Knoxville.

Smith is the author of two books: *Physical Dysfunction Practice Skills for the Occupational Therapy Assistant*, and *Occupational Therapy Transition from Classroom to Clinic — Physical Disability Fieldwork Applications*. She was named a fellow of the American Occupational Therapy Association (AOTA) in 2014 for Clinical and Academic Leadership Through Business Management.



Vicki Smith

1979

Joan (Meyers) Naylor, BSOT

Naylor retired as an OT and is currently self-employed as an artist. She is the mother of two children.

Elizabeth Tina (Rutledge) Veraldi, BSOT

Veraldi was among the first to take the standardized test for hand therapy certification in 1991. She recently retired after working as an OT since 1980. Her last position was as a certified hand therapist with SSM Physical Therapy, where she worked for more than 12 years.

1997

Linda (Mulrooney) Edmonds, MSOT

Mulrooney married Brad Edmonds in June 2006.

2008

Theresa (Carlson) Carroll, OTD

Carroll has been a clinical assistant professor at the University of Illinois at Chicago since January 2014. She is also the mother of two children, Marleigh and Flynn.

2013

Joe Brey, OTD

Pi Theta Epsilon (PTE), the national honor society of occupational therapy, held elections this spring and Brey, previously board secretary, was elected president.

Share your news!

Are you a Program alum with news to share? Or do you want to learn what your fellow alumni are up to these days? If you would like to submit Class Notes or update your contact information, visit ot.wustl.edu/alumni and click the arrow button to use the online form.

Class Notes can include career advancements, relocations, awards and honors, marriage or birth announcements and more.

We want to stay connected to you, so please submit your Class Notes today!

Student happenings



The Environmental Factors Facilitating Performance and Participation class has students experiencing first-hand what daily barriers a client with a disability may face.



Aaron Murray, MSOT/S '16 (left), explains pressure mapping to visitors at the Health Happening Fair on Jan. 30.



Students were inducted into Pi Theta Epsilon, the national honor society for occupational therapy students, on Feb. 11.



Students conduct a preliminary assessment of a child's motion at an outpatient clinic in the Gualan Nutrition Center during the annual Guatemala Service Learning Trip in March.



Sarah Oberle, OTD, OTR/L, demonstrates how to test an infant's stepping reflex to second-year students in "baby lab," part of the Fundamentals of Assessment Class I on April 2.



Backpack Awareness

On Sept. 16, occupational therapy students weighed backpacks and provided safety tips to avoid the pain and injury that can come from heavy backpacks and bags for AOTA's National School Backpack Awareness Day.

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Program in Occupational Therapy
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Occupational Therapy



Tweets we love
@WUSTLOT

"Carolyn Baum, @WUSTLOT, shares her work on exec function & activities after stroke
#NextAge Symposium @NUSingapore"
- Stephanie Herbers @herbers

Upcoming events



April 7 - 9, 2016

**AOTA 96th Annual
Conference & Expo**

Chicago, IL
McCormick Place - Booth #4643
www.aota.org/conference.aspx

*You are invited to the Program
in Occupational Therapy
Alumni Reception on April 9.
More information to follow.*



April 29, 2016

OT Scholarship Day

Eric P. Newman Educational Center
(EPNEC)
320 S. Euclid Ave.
St. Louis, MO 63110

*Registration information to come
at ot.wustl.edu*



May 20, 2016

Commencement

The Program in Occupational Therapy
Commencement Ceremony will be
held in Graham Chapel at 1:00 p.m.
on May 20, 2016.

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.