For many years, Tufts-BSOT student Alina Smiyun (’11) felt a calling to work with orphans in Ukraine. A native of that country, Smiyun got her chance last summer when she joined a service trip run by the Resource Foundation (www.resourcefoundationinc.org), a nonprofit organization that offers health care training and rehabilitative services in developing countries. For 10 days, Smiyun joined other occupational therapy students and clinicians visiting orphanages and clinics and working in homes with parents of children with disabilities. She spent another month working at events for people with disabilities, visiting rehab facilities throughout Ukraine, and volunteering at a camp for orphaned children.

These experiences “hit close” to Smiyun’s heart. “This was my country and I could see how much people were struggling to overcome everyday challenges,” she says. “Working in Ukraine opened my eyes to the importance of being a positive change agent wherever you go.”

For Smiyun and other students like her, service work is a natural extension of occupational therapy. “In our hearts, OTs want to give back. The profession lends itself to service work because we want to help people live life to the fullest,” she says.

Angelina Rayno (’12) agrees. A second-year student who has done mission trips to Peru and Haiti, Rayno has always been motivated by a deep-seated religious faith and desire to give back to those less fortunate. Having visited Haiti in the past, she felt compelled to return after the devastating earthquake in January, 2010. Rayno went on two mission trips to Haiti post earthquake—the first right after the disaster and the second in August. There, Rayno worked with missionaries in a tent city and orphanage in the Port-au-Prince area.

The destruction, she says, was incredible. During her visits, Rayno helped orphaned children with self-care—bathing, dressing, etc.—and engaged them in everyday activities; she also worked with adults on her first trip in February. When she returned in August, she was struck by how much life had returned to “normal” for the earthquake victims, despite the ongoing devastation. “The Haitian people are joyful and resilient. They were doing an incredible job of using ‘occupation’ as a way of coping with what had happened to them,” she says.

Rayno’s experiences confirmed for her the universality of occupational therapy. “Everyone engages in meaningful daily activity. The principles of occupational therapy can be applied to every person in every population, everywhere in the world,” she says.

Her service work has also made her more culturally sensitive—a trait that adjunct lecturer Monica Pessina, PhD, OTR, says is critical to an occupational therapist’s training. While in China last summer, with the group HandReach (www.handreach.org) and student Vanessa Vega (’11) (see BSOT Notes, Fall, 2010 http://ase.tufts.edu/bsot/documents/notes-fall2010.pdf), Pessina helped train Chinese clinicians, mostly doctors and therapists, in the treatment and rehabilitation of pediatric burn victims.

“Being in a foreign hospital made me realize how disorienting it must be for people from other countries to come here for medical care. It reminded me of the importance of POSITIVE CHANGE continued on page 3
A message from the chair:

One of the key values in the Tufts Department of Occupational Therapy’s mission statement is “compassionate service to local and global communities based on humanistic understanding and knowledge.” Indeed, occupational therapy is a service profession. In choosing this field, our students are responding to a personal calling to give back, to help others in need. And that is why occupational therapists make such wonderful volunteers.

In our training, we develop clinical reasoning and life skills that are exceptionally useful when responding to crises or pressing societal needs. Occupational therapists learn to make quick decisions and build on existing strengths; we understand how to flesh out decisive, action-oriented solutions in complex situations; and we know how to work within different environments and contexts to help individuals find meaningful occupation during challenging times.

To me, giving back is both a personal and professional response to need. Most occupational therapists I know view volunteerism as a natural extension of their professional identities; they think and act like occupational therapists all the time—in their family lives, in their community organizations and school systems, in their professional work, and in their acts of service.

In this issue of BSOT Notes, we highlight just a few of the ways in which our students and faculty are giving back through volunteer work. From helping burn and earthquake victims in China and Haiti, respectively, to recycling in our own backyard, the occupational therapy community at Tufts is dedicated to effecting positive change where it is needed most.

As I write this letter, another positive change is happening here at Tufts. The university recently welcomed Joanne Berger-Sweeney, MPH, the new Dean of the School of Arts and Sciences, and in the fall, Anthony P. Monaco, MD, will succeed Lawrence Bacow as president. Both of these leaders have impressive backgrounds in the health sciences and tremendous capacity to carry on the University tradition of excellence in teaching, research, and service. We thank President Bacow for his 10 years of service to Tufts and look forward to working with the new administration, whose commitments to education, scholarship, and practice mesh so closely with our own.

Linda Tickle-Degnen, PhD, OTR/L, FAOTA
Professor and Chair

OTD UPDATE:
Ashley Blackington puts passion and perseverance to work

Tufts-BSOT doctoral candidate Ashley Blackington, MS, OTR/L, has no shortage of passion for all things occupational therapy. A 2010 Tufts-BSOT entry-level masters graduate with an interest in traumatic brain injury (TBI), Ashley explored many health careers before deciding on occupational therapy. After graduating from Dalhousie University with a BSc in kinesiology, she considered a career in physical therapy. “When I was exploring career options, I worked with a number of rehabilitation professionals, including an occupational therapist. I found that OT was different from any profession I knew, and I immediately wanted to learn more,” she recalls.

Ashley’s focus shifted from her undergraduate plans to train athletes to rehabilitation—“the 99% of the population who were not trying to become elite athletes, but rather people learning to eat, get dressed, and engage in meaningful activities following an injury. It was the ‘occupation’ in occupational therapy that fascinated me,” she says.

Ashley was also intrigued by community-based practice. During her occupational therapy masters degree studies, she did a fieldwork placement at The Krempels Center, a community-based day program for adults with TBI in Portsmouth, NH (http://www.krempelscenter.org/). “I was really taken by the stories people told about their lives, about how they were trying to adapt after their brain injury.” While on fieldwork, she was also able to shadow other neurological rehabilitation professionals and attend the New Hampshire Brain Injury conference, where her interest in working with individuals with brain injuries first combined with working with the military.

Last fall, Ashley’s clinical interests coalesced when she joined Tufts’ OTD program. In her doctoral work, she is conducting a needs assessment for veterans with TBI with the hope of “creating a holistic picture of their needs at the community level. Those who go overseas to fight for this country deserve the best, most appropriate care possible when they come home,” Ashley says. Her project includes meeting with caregivers and service providers of veterans with brain injury, with the hope of OTD UPDATE continued on page 8
POSITIVE CHANGE continued from page 1 being sensitive to cultural differences."

For example, many of the Chinese families Pessina encountered felt that only trained medical professionals could have a role in their children’s recovery. Therefore, Pessina and the team tried to empower parents by teaching them exercises and other activities they could do at home to help their children heal. “Like any parent, they were eager to help their children, but culturally this was new to them,” Pessina says.

As an interdisciplinary mentor on the trip, Pessina chose to focus the occupational therapy treatment on three simple categories—scar management, daily living activities, and therapeutic play. Because training and resources in China are limited, Pessina knew it was important to “narrow the interventions in ways that would be effective and easy for Chinese providers to learn and implement.” She found the doctors and therapists receptive and energetic. “Many didn’t have a great deal of training, so they were eager for knowledge; they absorbed what we taught them like sponges.”

The work also made good use of the occupational therapists’ adaptive skills. While training clinicians in Chang Sha, Pessina and colleagues needed to be resourceful, making splints, games, and adaptive equipment out of everyday household items. “It was very rewarding to go into the local store and find supplies they could use in the care of these children,” Pessina recalls.

In fact, Pessina believes that service work, in general, is the “perfect place to use all of the skills we learn as occupational therapists. We have to look at the medical, psychosocial, and development aspects of a person’s situation, then add in that layer of creativity and resourcefulness,” she says.

For Alina Smiyun, Angelina Rayno, and the many others at Tufts-BSOT who feel called to service, volunteer work goes far beyond the special training they get as occupational therapy students. According to Rayno, “Service work is incredibly motivating and meaningful. I feel blessed that I have been fortunate in my life, and so I need to give back to others.”

THE MANY FACES OF SERVICE: Free Cycle Program gets off the ground at Tufts-BSOT

A little closer to home, Tufts-BSOT students are doing what they can to “give back” on the Tufts campus. For example, in 2010, the department opened its Free Cycle space in the basement of 26 Winthrop Street. Free Cycle is a place where students, faculty, and staff can drop off unwanted items, such as kitchen appliances, furniture, and clothing, and other students, faculty, and staff can come “shop” and take what they want.

According to Fay Martin, staff assistant in Tufts-BSOT’s fieldwork office and Eco-Ambassador for the Tufts-BSOT Office of Sustainability (http://sustainability.tufts.edu/), the Free Cycle concept developed in response to the University’s ongoing efforts to “go green” and her own observations that “students were throwing out perfectly good stuff at the end of each semester.” When a room became available in Tufts-BSOT’s basement, Martin and student Svea Van Langenhoven (’12) leapt at the chance to create a dedicated Free Cycle space.

Each semester, a portion of the clothing/household donations target needs of various constituents, serving organizations such as Cradles to Crayons (http://boston.cradlestocrayons.org), Soles4Souls (www.Soles4Souls.org), Women’s Lunch Place (http://www.womenslunchplace.org/), and Cambridge Cares about AIDS (http://www.ccaa.org/). “Free Cycle blends in nicely with both the university’s initiative and our own department’s. It encourages service work and a sense of community within the department—students, faculty, and staff working together for charity,” Martin says.

Van Langenhoven almost single-handedly launched the program, organizing the space and coordinating, sorting, and delivering donations. Now word is spreading throughout the Tufts community to broaden the donations received. To her, Free Cycle is an example of occupational therapy at work. “It’s all about providing people with what they need to adjust to changes in their lives. Someone [from Women’s Lunch Place or Cambridge Cares] might find a business suit donated from Free Cycle that she can wear to a job interview. That’s helping someone find meaningful work. That’s occupation.”

Van Langenhoven believes the Free Cycle concept is expanding the definition of service work. “Service has a lot of different faces,” she says. “You may not be able to go somewhere to serve, but you can donate something that someone else can use. Free Cycle is raising awareness that everyone can give back.”
A competitive swimmer in college, Sarah Everhart Skeels, MPH, always knew she wanted to pursue a career in athletic training or physical therapy. Paradoxically, just a few weeks before entering a PT masters program at Emory University, Everhart Skeels was hit by a car while riding her bicycle. She became paraplegic. “My journey into the world of therapy began very differently from the way I’d intended,” she says.

Today, Everhart Skeels develops health promotion and empowerment programs for people with spinal cord and other neurological impairments, sits on the board of several disability-related nonprofits, teaches sailing and skiing to people with disabilities, and lectures widely about disabilities, community, and health. So when Janet Curran-Brooks, EdD, OTR/L, asked her to guest lecture, Everhart Skeels was thrilled. She “loved talking to the budding therapists so much” that when a part-time lectureship became available, she grabbed it.

This past fall, Everhart Skeels co-taught Health and Community Systems with Jill Rocca, OTD, OTR/L; this spring, she is teaching Health Conditions. Although she is not an occupational therapist, her experiences with occupational therapy after her accident gave her great respect for the role occupational therapists play in recovery. “I understand firsthand that you get more out of life if you can engage in meaningful activity,” she says.

Everhart Skeels also believes she brings an important “non-OT” perspective to the classroom. “Most professors (at Tufts-BSOT) are occupational therapists. I offer a different focus: I’m the one who says ‘I’m from the other world, the community world. Here is the way I see it,’” she says.

Being among bright, engaged students who are fascinated by the realm of possibilities in the rehabilitation process has been “a dream come true” for Everhart Skeels. “I learned so much as a ‘client,’ and now I can give some of that knowledge back. My life has come full circle,” she says.

Welcome new faculty

Jane Koomar

Jane Koomar, PhD, OTR/L, FAOTA, is proud to be one of only a few professors of practice in the Tufts Graduate School of Arts & Sciences. Professors of practice are industry practitioners who teach from the perspective of being in the field. “I am so glad to be able to offer my clinical knowledge to students,” she says.

Koomar is the founder and owner of Occupational Therapy Associates-Watertown, P.C. in Watertown, Mass. (www.otawatertown.com), a private practice clinic specializing in sensory integration assessment and intervention. She also heads the Spiral Foundation (http://www.thespiralfoundation.org), a nonprofit dedicated to research and education related to sensory processing disorder. No stranger to academia, Koomar taught for many years in the occupational therapy department at Boston University, where she worked with current Tufts-BSOT Chair Linda Tickle-Degnen, PhD, OTR/L, FAOTA.

Koomar is teaching a practice course in pediatrics. She says she is “so excited” to be at Tufts, to both work with students and to “interact with colleagues who are on the cutting edge of what’s happening in the profession.”

“From the students’ perspective, a professor of practice brings immediacy and credibility to the information they are learning,” Koomar explains. “We discuss current, clinical examples that I might see in my practice every day. It makes the material come alive,” she says.

As both an academic and as a fieldwork educator in her private practice, Koomar continues to be impressed with the quality of Tufts students and the school’s interdisciplinary focus. “It is very rare—and special—for an OT school to be part of a university’s Arts & Sciences department. This designation is ripe with opportunity for collaborative research,” she says.
When Pamela S. Diener, PhD, MS, OT/L ('85) earned her BS in occupational therapy, she had no idea that, one day, she would be conducting research on the neurological disorder Rett Syndrome (http://www.rettsyndrome.org/), which has affected her younger sister Jolie since infancy. For many years after graduating from Tufts, Diener worked with children and premature infants with spinal cord injuries, cerebral palsy, and other neurological problems, practicing in acute care facilities, rehabilitation hospitals, and private clinics in Baltimore, Boston, and Washington, D.C.

In the late 1980’s, around the time Diener earned her MS in applied anatomy and physiology, a new surgical procedure to reduce spasticity in the legs of children with cerebral palsy was producing some interesting results. "As expected, the surgery significantly reduced the extent of spasticity in children’s lower extremities, but we were surprised to see a dramatic reduction in the extent of spasticity in the upper extremities as well. I knew it had something to do with the activity of neurons within the spinal cord. I was fascinated," she recalls.

Diener’s interest led her to pursue a PhD in neurobiology at Georgetown University, where she is currently an adjunct associate professor of gross anatomy and a principal investigator at the University’s medical center. She is also a tenured professor at Marymount University, where she teaches gross anatomy and clinical neuroscience. In addition to winning several faculty development awards from Marymount University, she has been awarded numerous grants from agencies such as the Christopher Reeve Paralysis Foundation and the National Capital Area Rehabilitative Research Network.

In addition to teaching, Diener spends much of her time studying how enriched environments can enhance motor skills in those with neurological disorders. In her early research, she published many studies focusing on the use of tissue transplants as a method to stimulate recovery of function following neonatal spinal cord injuries in animal models. "Later, I became intrigued by research that studied the effects of enriched environments alone on enhancing motor performance in normal animals," Diener says. This work led her to other research that has since demonstrated that exercise and other sensorimotor stimulation, such as exposure to different textures and cages that mimic an SI clinic, improve recovery of both skilled motor function and associated postural skills following neonatal spinal cord injury.
DIENER continued from page 5
cervical spinal cord injury.

More than 10 years ago, Diener suddenly recognized a link between her own research in animal models of spinal cord injury and her sister’s disorder, Rett Syndrome, a developmental disorder on the X chromosome that causes cognitive, sensory, motor, and emotional disabilities in girls. Research into Rett Syndrome was showing that, commensurate with the sudden regression of motor and cognitive skills that girls with the syndrome experienced, there was a reduction in a protein essential for neuronal development/function called brain derived neurotrophic factor (BDNF). Studies using various models of injury showed exercise and activities that provide sensory and motor stimuli increased BDNF in the brain. The possibility that these types of activities might also stimulate increased levels of BDNF in Rett Syndrome was intriguing.

This evidence led Diener to explore whether the sensory/motor enrichment protocol she developed for spinal cord injury might be used to enhance motor skills in those with Rett Syndrome, possibly by increasing or regulating BDNF production, which could, in turn, build better connections in the nervous systems.

Since then, Diener has been studying this question in a range of research initiatives. For example, she has implemented a mouse model of Rett Syndrome to determine whether environments enriched with motor and sensory input can ameliorate or delay the onset of regression in motor skills; she has also used hippotherapy (a treatment strategy that uses the movement of the horse for physical and occupational therapy) with girls with Rett Syndrome to improve limb and postural skills. (This latest study was made possible with a Mednick Fellowship awarded by the Virginia Foundation of Independent Colleges.)

In summer 2010—as part of Tisch College’s Active Citizenship Summer (ACS) Connecting Alumni and Student Experience (CASE) program (http://activecitizen.tufts.edu/?pid=834)—Diener hired Tufts-BSOT student Mackenzie Ewing (’12) to work with her on an ongoing $25,000 pilot-study grant to analyze the effect of enhancing motor skills in a mouse model of Rett Syndrome (see sidebar). Through her research, Diener hopes to further understand how exercise and other activities can increase sensorimotor skills and reduce symptoms for girls with Rett Syndrome.

Diener’s groundbreaking work has been published in many well-respected peer-reviewed journals, including the Journal of Neuroscience and The Journal of Comparative Neurology. But for her, the work is less about prestige and more about helping those with disabilities lead better lives—a drive she has had ever since growing up with her sister. “My occupational therapy training has taught me to be adaptive in my basic science research and to look at it with a clinical ‘twist,’” Diener says. “When I was practicing full-time as an OT, I wanted to better understand the neuronal pathways that underlie the motor patterns in the children I was treating. Now, these clinical questions guide my basic science research. The results of the research then direct my treatment of neurologically injured children. I believe there is a critical interplay between the two worlds.”

For more on Diener’s research, visit:
http://www.jneurosci.org/cgi/content/full/18/2/779
http://neuro.cjb.net/cgi/content/full/18/2/763
http://neuro.cjb.net/cgi/content/full/23/32/10321
linkinghub.elsevier.com/retrieve/pii/S0014488697966322

News and Accomplishments

Awards

Congratulations to Sharan Schwartzberg, EdD, OTR/L, FAOTA, 2010
Massachusetts Association of Occupational Therapy (MAOT) Catherine Ann Trombly Award recipient. This award honors a Massachusetts occupational therapist who has contributed significantly to the profession in the areas of education, research, and publications, and sets an example for others within the profession.

Faculty & student publications


Faculty & student presentations

Barnes, M. A. & Gagne, B. (October, 2010). Groups with children. Massachusetts Association for Occupational Therapy Annual Conference, Norwood, MA.


Buckley, V. (October, 2010). Creating mental health sensory tool boxes. Massachusetts Association for Occupational Therapy Annual Conference, Norwood, MA.

Carlini, K., Czepiel, T., Sewell, T., Dave, C.A., & Tickle-Degnen, L. (October, 2010). Gender differences in older adult role participation. Poster presented at the Massachusetts Association for Occupational Therapy Annual Conference, Norwood, MA.


Koomar, J. (October, 2010). Sensory integration trauma, and attachment: Interventions for children. Massachusetts Association for Occupational Therapy Annual Conference, Norwood, MA.


Tickle-Degnen, L. (December, 2010) What is occupational therapy? Tufts University’s Conference on Teaching and Learning, Medford, MA.


Please join us for our jointly sponsored Tufts/Boston University Reception at AOTA Conference: Friday, April 15, 2011; 6:30–8:00pm in the Loews Philadelphia Hotel. Hope to see you there!

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This issue is dedicated to Marion Crampton ’36.

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We’d like to hear from you.
If there are comments you would like to make, issues you would like to see covered, an article you would like to contribute, or if there is a fellow alumnus/a you would like to see interviewed for a future article, please contact us at the address above or e-mail BSOTNotes@tufts.edu.

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developing programming that addresses all populations involved in veterans care.

Current military research shows that blast injuries are the “signature wound” of recent global conflicts, with “more than 60% of blast injuries resulting in a TBI” (Sayer et al., 2008). An estimated 10–15% of U.S. veterans return home with some form of TBI (Hoge et al., 2008). Of that cohort, 10–30% have persistent, long-term symptoms that can interfere with the veterans’ ability to return successfully to work and family life. Individuals may experience a range of difficulties, including emotional regulation, depression, PTSD, and other subtle cognitive changes. Yet, research also shows that many veterans go right back to work or school following the acute phase of their injuries but soon realize that their lives won’t ever be the same (Terrio et al., 2009).

According to Ashley, the military is working to diagnose and treat brain injury as close to the trauma as possible. “My goal in meeting with veterans, family members, and service providers is to continue the conversation beyond the first few months home. If a veteran is not able to return to the life he or she had before deployment, how do we move forward? What is the best way to provide resources, to facilitate successful community re-entry?” she asks.

Ashley is thrilled to be pursuing her OTD at Tufts. She says the program’s clinical focus is a perfect fit for her. When she concludes her studies at Tufts this May, Ashley hopes to secure funding to implement a community-based veterans program based on her doctoral work. “I look forward to going out and fully putting into practice all that I’ve learned,” she says.