EMORY

extension

Division of Physical Therapy ■ Emory University School of Medicine

LEARNING THROUGH SERVICE

In Guatemala, a physical therapy student works with a child with cerebral palsy. More than 1,000 miles away, in South Georgia, another student watches farmworkers pick fruit in order to develop realistic therapy regimens. And right here in Atlanta, other students help sort and take inventory of

donated prosthetics and orthotics to be distributed throughout the world.

These are all Emory physical therapy students, engaged in various forms of service learning. It's an area enjoying new emphasis at Emory - and across the country. "We have always believed in service learning, but in the last two years we have worked harder to provide opportunities for our students," says Susan Freed, an assistant professor who is leading the service learning and volunteerism faculty committee.

While Emory supports both service learning and volunteerism, they are not to be confused. Service learning is experiential learning that is intended to benefit the provider and the recipient of the service equally. There is a deliberate connection made between service and learning experiences with conscious preparation for and reflection about the experience. Volunteerism, by contrast, primarily emphasizes the service being provided for the recipient of that service. (See "Off and rolling," page 3.)

"It's a trend all across the country to give students different types of learning experiences," says Freed. "An alternative environment provides a setting and a challenge that is not available in a typical medical clinic, and allows students to expand their horizons. It forces them to problem solve in novel environments and learn the process of dealing with different types of people with different problems."

The Emory physical therapy program currently offers three ongoing service learning activities. They are the South Georgia Farmworkers Health Project, a prosthetic and orthotic project and a project in Guatemala.

While physicians and physician assistant students at Emory

have participated in the South Georgia Farmworkers Health Project for over a decade, 2007 was the first year physical therapy students had a chance to get involved. The project sends students into the fields, literally, to teach injury prevention programs and provide physical therapy services to the migrant workers and their families. For the majority of the seasonal workers, the free clinics offered by this project are their only encounters with the medical system.

Many of the health problems of migrant farmworkers are

musculoskeletal- just the type of maladies physical therapists are trained to treat. So Freed and Brenda Greene, associate director of the physical therapy division, obtained a grant enabling them to develop an elective course in service learning that includes the opportunity to participate in the project. As a service learning experience, students were required to complete readings about the culture and common health problems of migrant workers and review the evidence that supports physical therapy interventions. Each farmworker referred to physical therapy received an individual evaluation and intervention.

"We went into the fields with the farmworkers and watched them work," says Freed. "As a result, we were able to see that some of our suggestions might not be practical and tried to change them to be more realistic to their needs."

Closer to home, Emory physical therapy students have been

Continued on page 3



Megan Brock, right, works with a patient in Guatemala as the local head physical therapist looks on.

Supporting our best



WELCOME ONCE AGAIN to the inside world of the Division of Physical Therapy at Emory School of Medicine. This issue of *Extension* introduces you to the research of some of our newer faculty and updates you on the work of well-known faculty such as Steve Wolf. We also feature two alumni who have taken their Emory education and

training into new areas of care (see pages 5 and 8).

And then there are our students. Read the story of Lori Northcraft, who is working toward Emory degrees in physical therapy and public health (see page 6). Fluent in Spanish and passionate about helping others, Lori cared for Georgia's migrant farm families this summer. Her experiences represent a small portion of the service-learning opportunities our division offers. Just this past year, Emory physical therapy students traveled to Nicaragua to work in a wound care clinic, raised money for cancer research and the Multiple Sclerosis Society, and staffed the South Georgia Farmworker project along with Lori. Visit our website—www.rehabmed.emory.edu/pt—to read more about our wonderful students.

I urge you to think seriously about contributing to the education of these students, who will be our colleagues and the future leaders of our profession. Become a clinical instructor, serve as a mentor, or make a donation to support student volunteer efforts. Our students have accrued an average debt of more than \$110,000 during their three years in the program. Help fund scholarships or provide unrestricted gifts we can use to strengthen the program wherever needed most. See the special envelope in this issue of *Extension* for more on giving to the Division of Physical Therapy.

My thanks—and the thanks of our faculty and students—go to all of you who already support the Division of Physical Therapy in so many ways!

Best wishes,

Susan J. Herdman, PhD, FAPTA, Professor and Director

New rehab medicine chair

David Burke, the new chair of Rehabilitation Medicine at Emory, has plenty of experience under his belt. In fact, he has several belts — all black in Taekwando.

Burke has practiced, studied, researched, and taught Taekwando for much of his adult life, "certainly longer than I've practiced medicine," he says. Some of his research gained the attention of the U.S. Department of Homeland Security, which invited him to serve as the chief medical adviser for the task force on flight attendant anti-terrorist selfdefense.

Burke doesn't see having to apply Taekwando-like force to transform Emory's physical therapy division, which falls under the Rehabilitation Medicine umbrella. He's impressed with where it is already. "The physical therapy school is one of highest rated programs in country and has been for quite some time," says Burke. "It has a strong research

program and has shown great innovation by adding the DPT/MBA and DPT/MPH dual degrees."

He envisions an even brighter future for the division. The university is engaging in a neuroscience building project to tie some 450 neuroscience-related faculty together in a collaborative effort that would be second to none, says Burke. He sees this as an opportu-



nity for the physical therapy division to expand and update its physical space as well as increase interaction with the neuroscience community. "We are already putting in a stroke clinic where physical therapists, neurologists, neurosurgeons and physiatrists will all be in one clinic to interact with patients," he says. "Patients who have been discharged will get post-stroke care at a high level, and we hope to expand that to other areas, as well."

Prior to joining Emory's medical school this past fall, Burke was one of the founding members and the first program director of the Department of Physical Medicine and Rehabilitation at Harvard. He also served as medical director of the post-acute brain injury program at Spaulding Rehabilitation Hospital there.

He is perhaps most widely known in the academic world for his research and clinical expertise in treating patients suffering severe brain injuries, both traumatic and nontraumatic. Much of his research focuses on understanding the mechanisms, the long-term outcomes, and neuro-chemical interventions to improve outcomes. — with Valerie Gregg

Learning through service continued from cover

working with the P.O.C.C. program (The Prosthetic and Orthotic Component Clearinghouse), which accepts and distributes donations of new and gently used prosthetic and orthotic components. In Georgia, the donations are stored in the MedShare warehouse off of I-20. That's where the Emory students come in. One student, Amy Stansill (DPT '08), enrolled in the service learning elective and accepted the assignment to organize the inventory process for the center and teach other students how to sort prosthetic parts. Materials can be ordered online for use by qualified medical personnel serving in countries with limited resources to build prosthetic and orthotic devices. This year, containers of P.O.C.C. materials need to be sorted for delivery to Iraq and to the Sudan.

"This is a project you can do right here in Atlanta, yet it has a global effect," says Freed.

This was the first year for Emory students to participate in a service learning project in Guatemala. Megan Brock, a third year

Students Rebecca Halperin, Megan

DPT/MPH student, received a scholarship from Emory's Global Health program to spend six weeks in Antigua working with Freed to initiate a sustainable service learning relationship with the Emory program. Obras Sociales Santo Hermano Pedro is a hospital in Antigua which is the primary residence for over 200 children

and adults with disabilities. The goal is to have Emory students, alumni and faculty work with the local physical therapists to expand resources available to their inpatient, outpatient and post operative physical therapy programs. A group of DPT students is currently planning a return trip to the hospital in early January 2009.

For Brock, the experience was an eye-opener. "It taught me to be resourceful and think on my feet," says Brock. "You have to be creative and sometimes willing to adapt what you've learned, instead searching for non-traditional ways to meet the patients' needs. You learn just as much from the local therapist as they learn from you. It's very inspirational to see how the local therapists meet the needs of so many patients with so little staff or resources."

An important component of all three service learning programs is the requirement to reflect on the experience. "We require students to reflect on why they volunteered and what they got out of it, and to write that down," says Freed. "It's a way to formalize the process of getting to know patients better and developing solutions that are appropriate."

This deliberate reflection hopefully will give the experience even more value for the students. "We want to extend our students' experiences beyond the academic tower," says Susan Herdman, director of Emory's physical therapy division. "They do go in clinical settings – both in hospitals and outpatient. But they don't get the same level of awareness of the kinds of problems that are facing people in some parts of the U.S. and in other countries. We want our students to become much more aware of those needs of other individuals and hopefully develop a desire to continually reach beyond their everyday work experience to help those who have greater needs." e

Off and rolling

a patient in Guatemala.

Brock and Meg Jacobs give care to

One day each March, Emory physical therapy students converge for the ING Marathon. As the primary sponsor of the wheel-chair half-marathon, the Emory physical therapy division mans the volunteer stations for the race.

The students can do any of a number of jobs. Some arrive very early on race day to tag and organize the racers' equipment. They store their daily chairs and bags, help the athletes transfer into their racing chairs (if they need help), tag their racing chairs and guide everyone to the starting line. Others pedal alongside the racers as bike escorts to assist if needed during the race. Following the race, students offer massages for any racer who wants one.

"The students gain a lot from the experience," says Jeff Hoder, an assistant professor who heads the volunteer effort. "And not only from practicing skills that they learned – massage and transfers – but also from interacting with the people. In physical therapy, they are used to bringing people to a certain level of skill. It is invaluable to meet these elite athletes and see what they are doing and gain a certain degree of appreciation for what people are capable of doing. It might change the goals that they set for patients."

DPT/MPH draws global-minded students

Lori Northcraft was already planning on attending physical therapy school when she entered the Teach for America program and worked as a teacher in the Rio Grande Valley in southern Texas on the border of Mexico. The experience opened her eyes.

"I realized addressing health care inequalities had to be done on a larger scale than one-on-one, so I started thinking about going to public health school," says Northcraft. "By the time I left Texas, I had decided I really wanted to study both physical therapy and public health, but no such program existed at that time."

Northcraft was touring the Emory's physical therapy school when the division unveiled the new DPT/MPH dual degree. "I couldn't believe it," says Northcraft. "I was just ecstatic."

Northcraft is one of two students enrolled in the first dual degree class. To gain the degree, students take two years of study in the physical therapy division, then do a year in Emory's Rollins School of Public Health. They finish with a year in physical therapy.

"In public health, you are looking beyond what your immediate family, friends and economic group are used to receiving in health care," says Susan Herdman, director of the physical therapy division. "Students do it to help prepare themselves to have a greater role in the health care needs of those in other countries or in other parts of U.S."

During their public health year, students can choose from a wide variety of traditional and non-traditional degree concentrations. "We offer a number of concentrations beyond what is usual for a school of public health," says John McGowan, a professor at RSPH. "Not only do we have a department of global health, which is fairly unique, but we offer degree concentrations in global environmental occupational health and global epidemiology. Our students tend to be individualistic, so they appreciate the opportunity to pursue innovative pathways."

The DPT/MPH degree puts Emory on the cutting edge. "We are one of the first physical therapy schools to have this dual degree," says Brenda Greene, associate director of the physical therapy division. "I believe there is only one other, and that is at

University of Southern California. It's a very innovative degree, and the two areas of study complement each other. One focuses on group intervention and the other individual intervention. One on prevention and the other on rehabilitation."

And it brings the number of dual degrees offered by the physical therapy division to two. Last year, Emory began to offer a DPT/MBA degree. "As far as I know, no other DPT program in the country offers two dual degrees," says Greene.

Megan Brock, the other student currently enrolled in the DPT/MPH program, decided to pursue the dual degree when she started doing clinical rotations. "I could not help but think about how system-wide healthcare issues affect each patient I worked with," she says. "I kept wondering what could be done to prevent many of the reasons patients are admitted to the hospital.

Oftentimes issues of access to care, health disparities and system-wide flaws are to blame. I just wanted to understand the bigger picture so I can better fit into it as a physical therapist."

Six weeks spent in Guatemala (see "Learning through service," page 1) broadened Brock's perspective. "My time in Guatemala raised my interest in global health issues and how cultural differences impact health care," she says.

Northcraft sees herself using both degrees in the future. "I definitely hope to practice as a pediatric physical therapist, probably right after graduation," she says.

"But I will have so much flexibility. I can

definitely see working in an office of migrant health or minority health.

I see myself having a variety of different jobs in the unique physical therapy and public health fields.

"I think it's fantastic that Emory offers this," Northcraft continues.

"I actually turned down a big scholarship in Boston to take this dual degree. It shows that Emory is very progressive, especially in physical therapy education. Not a whole lot of physical therapy programs out there address the rehabilitation needs of underserved populations." e

Innovating care for muscular dystrophy

Emory alumna Elise Townsend is combining her clinical practice and research interest in pediatric physical therapy at Massachusetts General Hospital. In January, Townsend joined pediatric neurologist Brian Tseng in a clinic he started for patients with Duchenne



muscular dystrophy (DMD). DMD is an inherited genetic disorder that affects about 1 in 4,000 live male births. The progressive neuromuscular disorder is characterized by progressive weakness throughout childhood, teen and early adult years.

Townsend, MPT 97, serves as the clinic physical therapist, which includes a multidisciplinary team with expertise in pediatric neurology, cardiology, pulmonology, nutrition, seating and mobility and orthotics.

"We all work together one day a week in the clinic, so families can come to Mass General and see our entire team of health care professionals in one day." says Townsend. "We are also planning studies to track and follow outcomes of different physical therapy and pharmacological

interventions. It's really quite innovative."

Townsend, who also teaches and advises students in the Doctor of Physical Therapy program at the MGH Institute of Health Professions, credits the solid foundation she received at Emory as contributing to her inspiration and success. "I had a fabulous experience at Emory from the moment I stepped foot on campus for my interview until the moment I left," she says. "Both academically and professionally, it provided the framework that has guided my practice ever since. If I hadn't had the experience I did at Emory, I probably would not have decided to become a faculty member myself. I have a continuing relationship with my mentor, Zoher Kapasi, that also keeps me very connected to Emory." e

Pursuing PhD in rehab sciences

Stacey Pagorek, DPT '03, is working toward a PhD in rehabilitation sciences at the University of Kentucky. "It's

a relatively new interdisciplinary program that integrates rehab care across disciplines, including physical therapy, occupational therapy, speech and athletic training," says Pagorek. The program prepares students to conduct rehabilitation related research, teach in higher education, direct discipline-specific educational programs, work in the rehabilitation services field, and collaborate with other professions on various rehabilitation issues. For her dissertation, she plans to focus on patellofemoral pain –specifically, criteria for diagnosing and treatment measures.

Pagorek already earned her sports certified specialist, while at UK. In fact, sports physical therapy was what lured Pagorek to Lexington in the first place – that and the urging of a UK clinician and former Emory physical therapy alum, Gail "Cookie" Freidhoff.

Currently Pagorek splits her time between working in the sports physical therapy clinic and teaching. "In the clinic, I see young recreational athletes all the way up to professional and collegiate athletes," she says.

Once she has earned her PhD, she hopes to become active in research. "I want to integrate clinical research into my current practice," she says. "I've been really lucky to move from Emory, where I



can't say enough about the mentorship and commitment to my development that I enjoyed there, to UK, where I have also had wonderful guidance. Cookie has been an excellent mentor in the clinic and the faculty at UK has been great in terms of guiding me down an academic path." e

STUDENT PROFILE

From football champ to Marine to PT



"Physical therapy
was a natural bridge
between what I was
doing as an athlete
and a Marine and
what I want to do as
far as helping people."

Robert Metzger

In 2000, Robert Metzger was on top of the world as only a high school champ can be. His football team had just won the state championship, and pumped full of promise, Metzger went off looking for the next challenge. He found it by joining the Marine reserves.

"I think the Marines definitely changes you," says Metzger, now a 2nd year physical therapy student. "The leadership component, the humility and also being able to deal with increasingly stressful situations. You learn to deal with any type of predicament. I gained a lot from it."

However, while serving in the Marine reserves and enrolled at Howard University in Washington, D.C., Metzger was diagnosed with Graves disease. The disease is characterized by hyperthyroidism, which speeds up various body systems, including the heartbeat, nervous and digestive systems. When his unit was activated and sent to Iraq in 2003, Metzger was deemed unfit to serve, and shortly thereafter was given a medical discharge.

It was a humbling experience that changed the direction of his life. "I came to see health as a critical factor to enjoying life," he says. "And that steered me toward physical therapy."

In hindsight, the decision makes a lot of sense. Metzger majored in exercise physiology – along with philosophy – at Howard University with an eye toward becoming a personal trainer. "Physical therapy was a natural bridge between what I was doing as an athlete and a Marine and what I want to do as far as helping people."

Metzger applied to several physical therapy schools, but when he visited Emory, it felt like the right fit. The clincher was the fact that Emory offers a dual DPT/MBA degree. "I do want to open up a clinic one day, but I've seen the struggle it can be," says Metzger. "I want to have the tools to make a clinic successful. I'm investing in myself. It will give me lifelong things I'll always have. I'm looking for a large return on that. Eventually, I hope to be able to do some unique things in physical therapy field. I'd like to create a unique business structure that combines physical therapy with other services, which would hopefully attract interest from a lot of different people." e

FACULTY NEWS

Greenfield gets emotional about PT education

Bruce Greenfield, an assistant professor, was recently awarded the Stanford Award by the Journal of Physical Therapy Education. He received the award, which is given to an author of a paper "containing the most influential education ideas," for his article on "The Role of Emotions in Ethical Decision Making: Implications for Physical Therapist Education."

The article discusses how emotions and feelings are interconnected with ethical reasoning, providing value to judgments. Indeed, scientists know the emotional and reasoning parts of the brain are linked, and both areas "light up" in a scan when the subject is presented with an ethical dilemma.

Bruce Greenfield challenges educators to teach students to be sensitive to their feelings.

"The challenge for educators is how to teach future health care professionals about being sensitive to their feelings and allowing them to guide their reasoning process," says Greenfield. "Western scientific tradition tends to frown on that, so first we have to convince students of the integral role feelings and emo-

"Once you do that, the next step is to introduce strategies and simulated cases that pull in reasoning and self reflection about the feelings involved," continues Greenfield. "The goal is for students to be able to recognize their feelings and be able to use them to make more reflective and mindful decisions."

Geist joins new faculty clinical practice

Kathleen Geist works with

faculty practice.

"It's an adventure."

a patient at the new clinical

When Emory's physical therapy department decided to open a clinical faculty practice, it asked Kathleen Geist to come on board. Geist had been working as a physical therapist in an outpatient clinic of Dekalb Medical Hospital and, for the past two years, also working in Emory labs doing mobil-

> ity and clinical measures. "They said I would be part of expanding a very new practice and also teaching, which for me sounded like an ideal opportunity," says Geist, who joined Emory's PT faculty in June.

The new practice, **Emory Physical Therapy** and Wellness Clinic,

opened in September. Geist works three days a week at the clinic, offering instruction in wellness/health promotion as well as providing treatment for the general orthopedic population with an emphasis on manual therapy. Other faculty practitioners include Jeff Hoder, who covers neurological-based impairments, and Marie Johanson, who treats ankle and foot injuries. "This is a brand new concept, where the faculty practice will be in association with the university," says Geist.

Geist received her BS from Georgia State University in 1997, She is currently enrolled in University of Indianapolis, pursing her DPT.

tions play in ethical decision making.

Wolf leads I-CARE study

Emory professor Steven Wolf has been named co-principal investigator in a \$12.4 million five-year study. Called Interdisciplinary Comprehensive Arm Rehabilitation Evaluation Stroke Initiative, or I-CARE, the study builds on Wolf's earlier work on constraintinduced movement therapy (see Emory Extension, Spring 2006).

The trial will investigate the effectiveness of the Accelerated Skill Acquisition Program (ASAP), an "intense and focused" outpatient rehabilitation program that emphasizes activities-based training and resistance exercises, and includes 30 hours of oneon-one therapy within the first three months of the stroke. The program also uses motivational techniques to encourage patients to self-manage their therapy.

"We typically assess the patient's movement and then tell them what to do," says Wolf. "In this study, we assess the patient but don't tell them what to do. Instead, we let them figure it out. The critical feature is that we are inducing problem-solving behaviors on the part of patient, and evidence shows the changes are retained much more effectively this way. With this limited exposure we have to patients, the more we can motivate and get them to problem solve on their own, the more effective. But no one has ever formalized this process. In fact, it's almost the antithesis of what is normally done."

Participants will be divided into three groups: the ASAP group, an outpatient group receiving a similar amount of physical therapy and a monitoring only outpatient therapy group.

"At end of day, we hope to have an approach that will work within the number of sessions reimbursed by insurance and be cost effective," says Wolf.



WELCOME CLASS OF 2011 We are pleased to welcome the DPT Class of 2011. Students in the class come from 21 different states along with one student from Canada. The class includes 40 females and 10 males, and the average age is 22 years. We are excited to have such a wonderful group of students and look forward to working with them all.

1st Annual White Coat Ceremony Held for the Division of Physical Therapy

The Emory University Division of Physical Therapy held its first annual White Coat Ceremony on September 6th, 2008, in Glenn Memorial Sanctuary. The ceremony marks the student's transition from the study of preclinical to clinical health sciences and also initiates them in physical therapy ethics.

At the conclusion of the ceremony, Dr. Susan Herdman led the students in a recitation of the APTA "Code of Ethics." A reception followed the ceremony.





Service of Gratitude Ceremony After a semester of learning about human anatomy through dissection and exploration, the first year DPT students at Emory hold a Ceremony of Gratitude to honor the people who donated their bodies for study. It is a simple ceremony and takes a form each first year class wishes it to take. The Ceremony is meant to celebrate all aspects of life and so it is always different, always surprising, at times joyful and at times reflective. This year, with song, poem, piano, dancing, and yes, even with struggles with juggling to music and with making a yo-yo fly, the students brought their talents, humor, love and their thanks to this Ceremony.

EMORY extension

ADVANCING THE SCIENCE AND ART OF PHYSICAL THERAPY

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