



Boston University College of Health
& Rehabilitation Sciences: Sargent College

NONPROFIT
U.S. POSTAGE
PAID
BOSTON MA
PERMIT NO. 1839

I N S I D E

**BOSTON
UNIVERSITY**

Sargent

Wendy Coster's
measurement tools help
children with disabilities
perform everyday tasks.



2008-2009



In 2007, BU embarked on a course to greatness. Learn more at www.bu.edu/president/annualreport.

For more information on Boston University College of Health & Rehabilitation Sciences: Sargent College, including the latest news and events, visit www.bu.edu/sargent.

Boston University's policies provide for equal opportunity and affirmative action in employment and admission to all programs of the University.

0908 949350

MESSAGE FROM THE DEAN

I am delighted to introduce this issue of *Inside Sargent*. In the past year, Boston University has embarked upon a new strategic plan entitled “Choosing to Be Great,” the cornerstone of which is a focus on offering excellent undergraduate and professional education while strengthening the quality of our faculty and student body. This issue of *Inside Sargent* will give you a snapshot of the great progress we have made on both of these fronts in the past year.

One major accomplishment this year was revamping our introductory freshman course from a large lecture to a small seminar format in which all freshmen have the opportunity to interact with our senior faculty. As you will learn, students read and discussed books on topics including the relationship between poverty and health, the challenges facing health care practitioners, and the effect of disabilities on individuals. The readings were made all the more meaningful since we were fortunate enough to have Dr. Jim Kim, co-founder of Partners in Health, whose work was the focus of one of the books the students read, as our annual Dudley Allen Sargent lecturer. The lecture was so popular that it turned out to be the best attended in the history of the Dudley Allen Sargent Lecture Series.

You will also read about the wonderful experiences that our undergraduate students have outside of the classroom—from study abroad to working in offsite and our own clinical centers, such as the Aphasia Community Resource Center. As you will read, these experiences are invaluable in helping students make critical decisions about their careers, whether they are interested in a career in direct clinical care or one that will involve health policy and administration.

There is no question that a key to the success of BU Sargent College is the quality of our faculty.

Dr. Wendy Coster, one of the faculty members who is featured on the cover this year, is the Chair of our Occupational Therapy department, which was rated the #1 program in the country by *U.S. News & World Report* this year. Professor Coster received the 2007 Eleanor Clarke Slagle Lectureship Award, the highest academic honor of the profession, from the American Occupational Therapy Association (AOTA) this past spring at the annual AOTA conference. Dr. Coster is recognized internationally for developing measures of daily life skills for children with disabilities.

We also feature the work of three of our newest faculty members, Dr. Susan Langmore, Dr. Sweta Girgenrath, and Dr. Christine Helfrich. Dr. Langmore, who joined our Department of Speech, Language & Hearing Sciences last fall, is an internationally recognized researcher and clinician in the area of swallowing disorders (known as dysphagia). Her research aimed at improving swallowing in patients with head and neck cancer is featured in this issue. Another important newcomer to the Sargent community is Dr. Girgenrath, who recently joined the Department of Health Sciences. Funded by a grant from the Muscular Dystrophy Association, Dr. Girgenrath is studying the cell biology of congenital muscular dystrophy. Dr. Christine Helfrich's research, which focuses on the importance of teaching homeless individuals life skills that will allow them to stay in housing, is also featured. You will learn about Dr. Paula Quatromoni, a member of our Nutrition faculty and an investigator on the world-renowned Framingham Heart Study, who is involved in research assessing the effects of diet and exercise on childhood obesity. Lastly, in this issue you can read about Sargent's ongoing commitment to community outreach through our Aphasia Community Resource Center, our Center for Psychiatric Rehabilitation, and the work of our students and faculty in other settings.

As always, I hope you enjoy this issue of *Inside Sargent* and I welcome your thoughts and feedback.

With warm regards,

Gloria Waters

Gloria Waters
Dean and Professor



L E A R N M O R E A B O U T S A R G E N T

We invite you to stay connected with the College and learn more about our programs and learning environment. To request more information, speak with a professor or student in your program of interest, or make an appointment to visit the campus, please contact :

Boston University
College of Health & Rehabilitation
Sciences: Sargent College
Graduate Admissions Office
635 Commonwealth Avenue
Boston, Massachusetts 02215

617-353-2713

E-mail: sargrad@bu.edu

VISIT OUR WEBSITE AT
www.bu.edu/sargent for more information about degree programs. You can also apply online and learn about financial aid and degree requirements.

TABLE OF CONTENTS

LEARNING	2
2 An Enlightening Experience for Sargent Freshmen	
4 Sargent Undergraduates Study Around the World	
RESEARCH	6
6 The Many Rewards of Healthy Eating	
8 Dysphagia: Testing a New Treatment Technique	
10 A Yardstick for Progress	
12 Helping Children with Chronic Muscular Dystrophy	
14 Grant Awards	
17 A New MSC	
CLINICAL APPLICATIONS	18
18 Teaching Skills for Living a Full Life	
20 A New Home: Using Research to Better Lives	
COMMUNITY	22
22 The Elusive Word: Bridging the Gap Between Mind and Mouth	
24 Learning While Helping Others	
26 A Well-Balanced Act: Academics and Athletics	
NOTES	28
28 Faculty in Print	
32 Awards & Honors	
COMMENCEMENT	32
AT A GLANCE	34

DEAN:

Gloria Waters, PhD

EDITOR:

Courtney de Lacy
Communications Manager

CONTRIBUTORS:

Maggie Bucholt
Monica Deady Lester
Siobhan Nguyen
Nicole Pavlas
Judy Rakowsky
Karen Soroca

DESIGN AND PRODUCTION:

Pamela Cooley
Shola Friedensohn
Patricia Reed
Boston University Creative Services

PHOTOGRAPHERS:

Kalman Zabarsky
Boston University Photo Services

WEB ADDRESS:

www.bu.edu/sargent

EDITORIAL COMMENTS:

Inside Sargent is an annual publication of Boston University College of Health & Rehabilitation Sciences: Sargent College, Boston, Massachusetts. To obtain additional copies or for more information about BU Sargent College, please contact Courtney de Lacy at cdelacy@bu.edu or 617-353-7476.

CONTACT INFORMATION:

For more information about degree programs, and applying to or visiting the College, please contact the BU Sargent College Academic Services Center at 617-535-2713.



Please recycle



Melanie Matthies

A required seminar, SAR HP 151 Introduction to the Health and Rehabilitation Professions was revamped into an exciting discussion-based course with thought-provoking texts that brought cohesion and community to the 2007 freshman class.

"It was more fun and more of a challenge than other approaches we usually take to course development," said Melanie L. Matthies, associate dean and associate professor of speech, language, and hearing science, who was charged with reorganizing and coordinating the course. "This was a team effort. Everyone was very generous with their time and ideas."

Classes were taught by 10 senior faculty members, including Matthies, all of whom facilitated discussions and served as role models in both critical analysis and conversation across a wide range of health-related issues, including topics based on their research backgrounds. A healthy exchange of ideas ensued, as the class discussed the books *Mountains Beyond Mountains: The Quest of Dr. Paul Farmer, a Man Who Would Cure the World*, by Tracy Kidder; *How Doctors Think*, by Jerome Groopman, MD; and *No Pity: People with Disabilities Forging a New Civil Rights Movement*, by Joseph Shapiro.

"Not everyone was going to agree with everything that was said, and that was the fun part," she said. "The discussions are an excellent opportunity for our faculty leaders to model civilized discourse so that the students see what constructive disagreement looks like."

The corresponding ninth annual Dudley Allen Sargent Lecture featuring Jim Yong Kim, MD, a co-founder with Paul Farmer of Partners in Health, a nonprofit organization to combat global health care disparities, drew a record turnout. According to Matthies, most students were extremely inspired by the book.

Matthies met several times with the department chairs and Dean Gloria Waters to discuss the approach and basic principles before coming up with a bare-bones framework, which the HP 151 team later filled in with specifics. The course, initially designed to introduce freshmen to Sargent College and its programs, had not changed in several years. It did not, for example, include material specific to the human physiology or health science majors, two undergraduate

programs that currently account for half of Sargent's students. Previously, the two-credit class was taught in a large lecture hall by rotating faculty.

Matthies said her goals were to give students a more realistic background on health and rehabilitation sciences as a whole, including the relationship between poverty and health, the challenges facing health care practitioners, and the effect of health and disabilities on individuals. Instead of a lecture hall-based format, the emphasis was on small classes of 10 to 12 students, which met in the Dean's Conference Room. The foundations of the new course were based on an integration of analytical reading, class discussion, and essay writing.

"Students need to understand the broader framework of health care and its underlying concepts," Matthies explained. "Health care

An Enlightening Experience for Sargent Freshmen

is organized into different kinds of systems, and the choice of a system has an impact on society."

The course requirements included eight one- to two-page essays and three short papers of four to five pages. All of the written work was evaluated by Theodora Goss and other instructors from the College of Arts & Sciences (CAS) Writing Program. Goss, a CAS doctoral student, developed the standards and appropriate materials and teaching requirements. "It was a pleasure to collaborate with Dora. She is a published author herself and set high standards for written work in HP 151," Matthies said. Papers were graded for organization and clarity. Prior to each class, three discussion topics were announced; students could choose one of the questions and submit their responses in writing as a one-page essay requirement. This way, every student was well prepared to discuss at least one of the three topics assigned. Half the grade was based on students' participation in the discussions. They had to actively listen; to con-



Books used in HP 151, *Introduction to the Health and Rehabilitation Professions*: *No Pity*, by Joseph Shapiro; *Mountains Beyond Mountains*, by Tracy Kidder, and *How Doctors Think*, by Jerome Groopman, MD.

tribute and engage each other with well-reasoned arguments; and to comment on each other's insights and personal experiences.

"What shocked me was that nearly everyone had a story about receiving poor medical care, ranging from doctors being rude or dismissive to episodes bordering on malpractice," Matthies said. "That kind of sharing helped everyone feel connected."

The instructors' efforts resulted in mostly enthusiastic and positive responses from students, such as these extracted from course evaluations: "I am a shy person but the class is small, so I did not feel intimidated... I liked the relaxed environment." "Everyone was open to each other's ideas." "The writing assignments were useful because they helped me focus on the important aspects of the reading."

According to Matthies, the faculty was very creative in their class preparations and used different approaches to make the mate-

rial come alive, including Web links, cartoons, and video clips. For example, one professor used the Google earth website to show specific areas in Haiti, New York City, and Boston for a discussion surrounding the books.

"I was happy to have had this opportunity to collaborate with so many people and to see the personal interaction between senior faculty and freshmen," said Matthies. "Their immediate connection and the sense of community were wonderful to see."

Sargent Undergraduates Study Around the World

During her semester in London, Jessica Spiegel worked for a group lobbying for stem cell research and her class got a firsthand look at the British health care system on a hospital tour.

Another Sargent junior, Adam Solimen, enjoyed his economics courses in London but was really moved by the sight of hundreds of people queuing up to make withdrawals from the troubled Northern Rock bank.

"I thought it was pretty cool to witness such a strange thing in history. People lost trust in banks," he said.

And during her summer semester in Dublin, Katie Wieder learned about the challenges that nongovernmental organizations face in trying to help people when she worked with Médecins Sans Frontières/Doctors Without Borders.

Sargent undergraduates—who study abroad in exotic locales from India to South Africa and China to Switzerland—gain valuable

insight into other cultures while pursuing their degrees.

"It was a great experience, and I loved every second," said Spiegel, who said she started out loving everything about London.

"In the end, I had newfound respect for America and couldn't wait to get home."

But even the merits of the British nationalized health care system did not ultimately make her want to trade in her homeland.

"In the end, I had newfound respect for America and couldn't wait to get home," she said.

Getting outside U.S. borders does offer a perspective that can make a career decision click.

Spiegel's experience, for example, helped her realize that she wants to concentrate on clinical care rather than health care policy.

"I still want to be in health care 100 percent. I really want to help people and one of the most basic ways is to make sure they are healthy."

Solimen still plans to aim for a health care management career, but his internship with a British law firm offered a fascinating peek into the world of wiggled legal practitioners. He came away grateful for the chance to see things he wouldn't have if he'd stayed state-side.

"It's 100 percent worth it," said Solimen. "Otherwise you'll have four years of, in essence, the same thing."

Students don't always wind up in their first choice of countries. For instance, Wieder said that learning about public health systems in an African country—her preference—was not possible; she could go abroad only during the summer because she is on the varsity cross-country team. But she learned that even a western country like Ireland often approaches life and work differently than the United States.

"The Irish workplace appears to be more relaxed than the U.S.," she said. "Supervisors are not questioning your work or rate of productivity."

Opposite page: Sargent student Jessica Spiegel in Spain. Left: BU students take a break from sightseeing; two photos taken by Katie Wieder during her travels, one of Howth, Ireland, and the other of the Wicklow Mountains in Glendalough, Ireland; Spiegel and friends in London.



Paula Quatromoni

The Many Rewards of Healthy Eating

When lunch for middle school students consists of brownies, potato chips, and ice cream treats, it doesn't take a top-notch epidemiologist to see red flags for childhood obesity. But it does take solid research by an epidemiologist to determine whether a program to promote healthy food choices in middle school can bring about positive change in eating habits, and that's where Paula Quatromoni comes in. She started with a small study in her hometown of Medfield, Massachusetts, and found that even relatively affluent Caucasian youths eat too much pizza and too few vegetables and do not exercise enough.

Then Quatromoni discovered that a Charlestown produce distributor had recently introduced a healthy eating program called "imove" into about a dozen area middle schools to encourage students to choose more nutritious lunch meals in the school cafeteria. Imove meals are made with more vegetables, fruits, and whole grains and less salt, sugar, and fat. Quatromoni, an assistant professor of nutrition at BU Sargent College and an investigator on the world-renowned Framingham Heart Study, was awarded funding from the private Charles H. Hood Foundation to bring imove into middle-school communities serving racially diverse and economically disadvantaged children and to evaluate the program using a scientific research design.

"A lot of people are trying to do the right thing, from food service managers to physical education teachers," said Quatromoni.

"But we need to do research and collect

data to determine what strategies actually impact obesity risk."

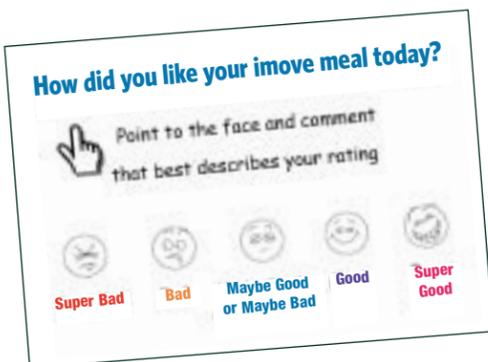
Quatromoni devised a study that surveys students on their eating patterns, examines their food purchases, and tracks their height and weight over a school year. The study is testing the effectiveness of Costa Fruit & Produce Company's imove program in four middle schools in Quincy and New Bedford. In each city, one school is receiving imove and one school is not, allowing for meaningful comparisons. Specifically, the research is testing whether students change their food-choice behavior in the presence of healthy alternative lunches, occasional promotions with free samples of fresh produce, and incentives in the form of raffle tickets for each imove meal purchased. Raffle prizes range from skateboards and basketballs to iPods and Red Sox tickets, with an annual grand prize of a mountain bike.

"It's really fun to see the students get so excited about why we are doing this," said Quatromoni. "They taste new foods and win cool stuff, and that makes the connection that healthy eating can be fun. When they receive positive reinforcement for trying something new, students build confidence that makes them open to trying again."

While the research is still under way, Quatromoni has seen for herself that the

program has introduced students to new flavors and acceptable new foods.

Every six weeks or so, Costa sponsors fresh produce displays with free samples in the imove schools. She heard one Quincy middle-schooler remark, "I've never tasted a fresh blueberry before," and, "I never knew there



was a fruit called 'ugli fruit!'" The research has been challenging for the same reasons that the schools were chosen—permission forms had to be translated into Vietnamese, Chinese, Portuguese, and Spanish.

"The schools don't always have what they need. This is really humbling work," she said.

To determine who is buying the imove meals, Quatromoni used grant funds to buy the school cafeterias sophisticated cash registers that require each student to punch in a four-digit code upon checkout that automatically records his or her lunch purchase.

The graduate students on the study helped school nurses measure and record the height and weight of each student. This data and general demographic information can then be combined with cafeteria food purchase records.

"That's how we can tell if we are reaching students who are most at risk, including overweight students, children from lower income families, and those of racial diversity," Quatromoni said.

The graduate students involved in the study also go around the cafeteria with clipboards and ask middle schoolers to pick from one of five cartoon facial expressions to match how they feel about the turkey tacos or hummus and raw veggies they just ate for lunch. The study hopes to also evaluate Costa's records of deliveries to the schools to see whether demand for salad components and other produce increases as students' habits change.

In each school, the study reaches from 500 to 1,300 students. Because of delays getting the cash register systems and staff training up and running in Quincy, data collection did not start until spring of 2008, requiring the study to extend into the next school year. In New Bedford, data collection was completed during the 2007-08 school year.

Over the course of the project, there will be up to eight graduate students involved, one of whom is a doctoral student in epidemiology at BU's School of Public Health (SPH) who is doing her dissertation work using these data. Also involved are SPH co-investigators Jonathan Howland from the Department of Social and Behavioral Sciences and AI Ozonoff from the Department of Biostatistics.

Ideally, this innovative study will be a catalyst to larger research initiatives addressing childhood obesity. Costa is already working in partnership with the Massachusetts Department of Public Health through a migrant program to offer healthy imove meals to more school districts. Quatromoni anticipates that the next phase of her research will combine the healthy eating alternatives with a physical education component for greater effects.

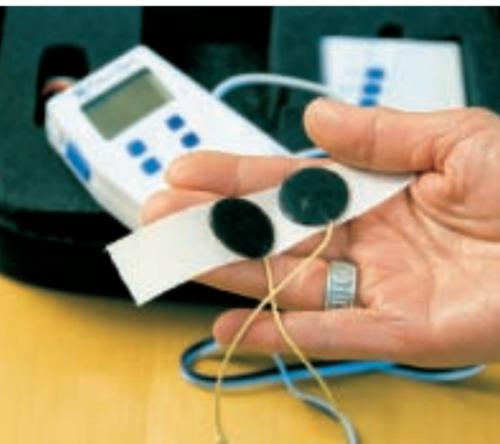
"Hopefully, this is the beginning of something bigger," she said.



Above: Assistant Professor of Nutrition Paula Quatromoni brings the imove program into middle-school communities.

Left: A student proudly holds up an iPod, her reward for healthy eating, Quatromoni interacts with children in a school cafeteria among the fresh fruit displays presented by Costa.





Susan Langmore

Swallowing is something most of us take for granted, from enjoying the last swig of morning coffee to clearing our throat before making an important announcement.

Individuals with dysphagia or a swallowing disorder may struggle to accomplish these simple activities, explains Susan Langmore, PhD, CCC/SLP, BRS-S. Beyond difficulty with activities like these, a serious swallowing problem may have even worse health consequences. A person with dysphagia may not be able to eat properly, resulting in weight loss, or they may aspirate, forcing food or liquid into their lungs, which can result in pneumonia.

Langmore explains that while working with swallowing patients, clinicians may try to introduce foods with various consistencies to determine whether a patient may be able to eat a thin or thick liquid. Other ways to help individuals swallow include changing their position while they eat.

While these methods sometimes help a patient, they may not always be successful, and a feeding tube may be necessary to ensure proper nutrition.

Langmore, who joined the Department of Speech, Language & Hearing Sciences in the summer of 2007 as a clinical professor, is currently researching another method to improve swallowing in patients with dysphasia.

Through a grant from the National Cancer Institute at the National Institutes of Health, Langmore is leading an investigation into whether exercise paired with electrical stimulation can improve swallowing problems in

DYSPHAGIA: Testing a New Treatment Technique

head and neck cancer patients three to six months after radiation therapy.

Radiation therapy can cause the tissue in the throat to scar, and scar tissue is not as pliable as regular skin. Because this scar tissue is not as malleable, when a patient tries to swallow, the throat muscles do not contract as much as they would in a normal person. The treatment will hopefully keep the muscles working, so that they do not stiffen, and swallowing will improve.

At 14 different sites around the country, Langmore's study will evaluate the effect of electrical stimulation and exercise on swallowing in 240 patients, who will be randomly placed into one of two groups.

In the experimental group, patients will use an electrical stimulation device, placed on the skin under the chin, along with swallowing exercises. They will undergo three, 20-minute sessions a day, six days a week, for three months. During each session, a

tone in the electrical stimulation device will indicate that they are to swallow forcefully 60 times over the course of each treatment.

"It's a very intense program," Langmore said. She explains that when the electrical stimulation comes on, it should help the muscles under the tongue contract. This is important because those muscles are active very early in the sequence of swallowing. "I like to think of it as sort of a jump start to the swallow."

The control group will undergo the same steps but their device will not administer electrical stimulation.

To determine what part, if any, the electrical stimulation device played in patients' recovery, speech pathologists will measure several swallow parameters from recorded video fluoroscopy studies done before, in the middle of treatment and after treatment. Quality-of-life instruments and other functional measures will be given as well. The goal is to answer the questions, "Does the swallow get better? Does the patient's diet improve and does he or she report a better quality of life?"

While the clinicians who prescribe the therapy for the patients will know who receives a true electrical stimulation device, those who analyze the swallows will not know.

Langmore's clinical trial began in 2007, and the first year was spent preparing clinicians to implement the study, writing procedures, and getting approval from the local institutions' review boards before beginning. They expect to begin registering patients for the study on September 1, 2008.

Langmore said that electrical stimulation is used frequently in the field of physical therapy, and has also recently become popular for treating patients with dysphagia despite a lack of solid research to prove its effectiveness.

"I believe this study is important because no one has ever studied whether intense exercise really helps patients with swallowing problems secondary to head and neck cancer treated with radiation therapy," Langmore said. "Our experience has told us this is effective, but no one has ever proven it." She hopes her efforts shed light on the issue.

"Although I do think it's very promising, we need a good trial to see who it helps," she said. "I think it will have an impact—whether the results are positive or negative, we're going to know more about the effectiveness of our treatment."

Aside from her research, Langmore sees patients at Boston Medical Center and teaches at BU Sargent College. In addition to these activities, she is also known in her field for having developed a frequently used procedure for evaluating dysphagia: fiberoptic endoscopic evaluation of swallowing, or FEES.

Right: Susan Langmore, clinical professor, Department of Speech, Language and Hearing Sciences at BU Sargent College, and professor, Department of Otolaryngology-Head and Neck Surgery at BU Medical Center. Above: Langmore displays the electrical stimulation device and where it is placed on the patient; Langmore working with a swallowing patient; an anatomical model of the musculature and other major structures used for swallowing.



A YARDSTICK



Left: Wendy Coster, professor and chair of the Department of Occupational Therapy at BU Sargent College. Above: Professor Coster's research is primarily with pediatric measures; parents are asked to fill out inventories to help Coster gather her research; Coster at a focus group with the parents of children with disabilities.

Wendy Coster

Wendy Coster knows the value of a yardstick. In 1992, she helped revolutionize the world of occupational and physical therapy with what is considered the gold standard for measuring how well children with disabilities or impairments perform daily life skills, and she has soared from there.

Coster, who chairs the Department of Occupational Therapy, saw the need in the 1980s for good instruments to measure performance of critical activities of daily living, ones that would produce consistent scores no matter who interviewed the parents or whether that child was having a bad day. But when Coster teamed up with physical therapist Steve Haley, now at the School of Public Health, there was a "Catch-22" operating in grant funding.

leveled against previous assessments.

"We don't ask what method they use to get their shirt on or tie a shoe, we just ask, whatever method they use, can they get it done?" said Coster.

After the PEDI was published, it quickly became not only nationally recognized, it was translated into 10 languages, including Chinese and Hebrew. It is now the standard for research and clinical practice, providing a measure of functional progress and guiding therapies ranging from pharmaceutical to behavioral.

"Once the measure was available, I could see how it changed the field," she said. "It really did make a difference."

Coster has made such a difference not only with the PEDI but with her entire body of work that she was awarded the 2008 Eleanor Clarke Slagle Lectureship, the profession's highest academic honor and also the highest honor given by the American Occupational Therapy Association.

assessment in 1998 after three rounds of data collection.

The School Function Assessment also has been acclaimed internationally, translated into Icelandic, Chinese, and Hebrew, and is used for research in Israel.

Coster's next undertaking is to develop a measure to describe the participation of children and youth with diverse disabilities—including physical and learning disabilities, autism, and behavioral disorders—in important community and home activities. The goal is to create an instrument that can capture the extent to which children with disabilities are engaged in culturally meaningful activities and events such as family meals, religious services, community outings, and organized groups such as the Boy Scouts, which is more challenging than the clear-cut tasks measured in the PEDI. A parallel scale will measure factors that facilitate or create barriers to participation. The three-year project is supported by a grant

for PROGRESS

"We don't ask what method they use to get their shirt on or tie a shoe, we just ask whatever method they use, can they get it done?"

"Everyone wanted you to use good measures if you were going to run a clinical research trial, but they didn't want to give you any money to develop the measures," said Coster, a professor of occupational

therapy. "They just didn't get it."

At that time, whether a child was developmentally disabled or suffered an injury or illness, there was no way to measure how well he or she performed basic life skills such as dressing, teeth-brushing, getting to school, or eating family meals. The only yardsticks were IQ tests, which measure cognitive skills but not whether a child could process an instruction.

A major achievement of the Pediatric Evaluation of Disability Inventory (PEDI) is the way it is calibrated to show small increments of progress. It also does not limit the method a child uses to accomplish a task, a criticism that the disability community had

Dr. Coster's work is credited for its creative contribution to the profession's body of knowledge. "Dr. Coster is an exemplary faculty member and tremendous asset to Boston University Sargent College," said Gloria Waters, dean of Boston University College of Health & Rehabilitation Sciences: Sargent College. "She is truly a gifted teacher, researcher, and administrator."

From the PEDI, Coster went on to develop another groundbreaking instrument, the School Function Assessment, which measures how well a student with a disability manages in a school environment, from getting in and out of a chair to interacting with peers. The instrument works like a detective for obstacles to success. For instance, if a student with mobility problems cannot arrive at art class until the rest of the class is launched on the project, this student may have limited time to complete it, resulting in not only performing poorly in art but in frustrations that might cascade to other areas. Without proper detection and intervention, larger problems might develop.

"It could start with a mobility problem but it becomes a much larger problem," said Coster, who published her research on the

from the National Institute on Disability and Rehabilitation Research.

"If it weren't challenging, it probably wouldn't be interesting," Coster said. "You have to define what you're asking clearly enough to get decent data that are also clinically useful."

Meanwhile, Coster and Haley have another grant to revise and refine the PEDI, which comes in a current climate of greater support in the funding world for ways to standardize measures of function—the National Institutes of Health has been increasingly inclined to spend money on projects to ensure research results can be compared, Coster said. Now, grant providers see the wisdom of developing yardsticks.

As she refines the PEDI, Coster sees how far her research and the field have come. "I wish I'd known then what I know now," she said. "But as we learn more, we'll get better and better at designing the measures for what we really want to know."

Sweta Girgenrath

HELPING CHILDREN with CHRONIC MUSCULAR DYSTROPHY

Can muscle cells deficient in laminin—a protein that normally helps anchor muscle cells—be manipulated to prolong life and reduce the effects of a rare form of muscular dystrophy?

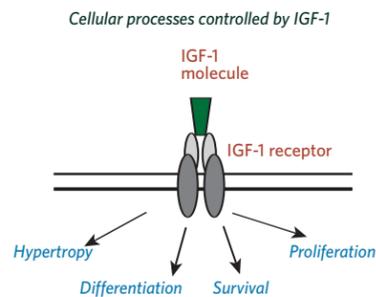
Newly hired Assistant Professor Mahasweta Girgenrath, PhD, is studying the cell biology in congenital muscular dystrophy (CMD). CMD is the term given to a group of progressive muscle-wasting diseases that affect both male and female infants at or shortly after birth. Health of muscle cells depends on proper structure function of their integral proteins, including laminin. In the muscle cells of infants with MDCIA, the most common form of CMD, laminin is missing or dysfunctional. The symptoms can range in severity from mild to extreme, and often lead to death in early childhood. CMD occurs in one out of 100,000 births.

CMD is one of nine types of muscular dystrophy, an inherited disorder caused by genetic defects that results in the weakness and degeneration of the skeletal muscles that control movement. There are no cures for any of the muscular dystrophies, only treatments for secondary symptoms.

“My major goal is to understand the pathophysiology of this and other forms of muscle degenerative diseases and prevent or ameliorate symptoms,” says Girgenrath.

She is the principal investigator on two research grants, one from the National Institutes of Health and a second from the Muscular Dystrophy Association (MDA), awarded to develop strategies to treat laminin deficiencies. The MDA grant is

part of the special translational research program designed to fast-track treatment approaches for rare neuromuscular diseases that have proven promising in initial studies, since for-profit drug companies are mostly interested in developing drugs that affect a large segment of the population. The MDA defines translational research as “preclinical activities leading up to a clinical trial.”



MDCIA is rare compared to the more common Duchenne muscular dystrophy (DMD), which isn't detectable until a child is three to five years old. DMD affects only males; boys may live as long as 25 or 30 years. In DMD, the missing protein is dystrophin. Clinical trials are already under way for DMD patients, including one with gene-compounds being injected into bicep muscles, and have shown promising results. DMD affects one in 3,500 male infants.

“MDCIA is such a devastating disease,” says Girgenrath. “And those affected are helpless infants. It's pretty scary because

there is no cure. I'd like to try to do something about it.”

Girgenrath has always been intrigued by the mechanisms that regulate skeletal muscle growth, repair, and survival in the context of muscular dystrophies. After continuing her muscle research as a post-doc at Pennsylvania State University, she switched to cardiac biology at Brigham and Women's Hospital only to realize where her passion lay and accepted a research position at Boston Biomedical Research Institute (BBRI) in Watertown, Massachusetts, an independent nonprofit lab dedicated to forging a connection between basic discovery and medical application.

“I wanted to go back to muscle research,” she recalled. “I was lucky to get into the right lab.”

At BBRI, regenerative biology is one of four program initiatives for life debilitating and deadly diseases, including muscular dystrophy. She worked with scientist Jeffrey Boone Miller, her mentor, for six years. There, she was part of a team and became the lead author on several papers in peer-reviewed journals, including an article in the *Journal of Clinical Investigation* on hampering apoptosis—a type of cell death—to prolong survival of those suffering from CMD.

Girgenrath and her colleagues found that two genetic interventions increased survival rates in laminin-deficient mice. Some mice were bred to overproduce a protein called Bcl-2, which protects against apoptosis (cell death), while others were bred not to produce another protein called Bax, a contribu-

tor to cell death. According to Girgenrath, the lack of the Bax protein improved life span growth and muscle health. The Bax-free mice were larger than those bred to replicate CMD, although not as large as healthy mice. Bax lessened the disease severity and made the muscles more resistant to cell death.

“We had noteworthy improvement in the pathology,” she says. “The mice lived 25 weeks or 175 days, instead of 28 to 42 days. That's quite significant.”

Girgenrath speculates that perhaps a combination of therapy strategies might help to prolong life for infants with CMD. For example, along with inhibiting apoptosis and facilitating muscle regeneration, using growth factors such as IGF-1 might improve the experimental outcomes.

In addition to her research, Girgenrath is in the process of developing a course on the biology of muscles in health and disease for the Spring 2009 semester. She is also excited about pursuing her muscle-stem cell research and hopes to have more undergraduate and graduate students to assist her in the lab by fall 2008.

“We're still struggling to figure out a treatment regime to benefit the quality of life and improve life expectancy,” she says. “Researchers may not find a cure in the next couple of years, but prospects of developing a successful treatment regimen are very bright.”

Left: Sweta Girgenrath, assistant professor in the Department of Health Sciences at BU Sargent College.

Below: Girgenrath in her lab at Sargent with her research assistants and graduate students.



2007-2008 Grant Awards

From July 1, 2007, to June 30, 2008, Boston University College of Health & Rehabilitation Sciences: Sargent College received research funding in the amount of \$8,607,697.

Below is a sampling of funds received during this period.

Principal Investigator	Project Title	Agency	Funds This Action
Helen Barbas, Professor of Health Sciences	Organization of Prefrontal Feedback Circuits	NIMH	\$344,546
Helen Barbas, Professor of Health Sciences	Prefrontal Anatomic Pathways in Executive Control	NINDS	\$354,116
Helen Barbas, Professor of Health Sciences	Architecture of Myelinated Axons Linking Frontal Cortical Areas (V. Zikopoulos)	Autism Speaks	\$53,000
Sharon Cermak, Professor of Occupational Therapy	Physical Activity, Fitness and Obesity in Children With Coordination Disorders	NICHD	\$152,822
Sharon Cermak, Professor of Occupational Therapy	Training Long-Term LEND Neurodevelopmental Disabilities	HRSA	\$30,016
Sharon Cermak, Professor of Occupational Therapy	Diet, Activity, and Obesity in Children with Autism (Subcontract via UMass Medical Center)	NICHD	\$5,102
Jeffrey Coady, Assistant Professor of Speech, Language & Hearing Sciences	Lexical Influences on Nonword Repetition by Children with and without SLI	NIDCD	\$81,250
Ellen Cohn, Clinical Associate Professor of Speech, Language & Hearing Sciences	IPA: Culture and Communications in Hypertension	Dept. of Veterans Affairs Management	\$21,034
Wendy Coster, Associate Professor of Occupational Therapy	Development of Measures of Participation and Environment for Children with Disabilities	Dept. of Education	\$195,233
L. Clarke Cox, Clinical Associate Professor of Speech, Language & Hearing Sciences	Hearing Acuity, Cognitive Aging, and Memory for Speech	NIA	\$20,313
Marianne Farkas, Director of Training, Center for Psychiatric Rehabilitation	Innovative Knowledge Dissemination and Utilization for Disability and Professional Organizations and Stakeholders	U.S. Dept of Education	\$499,966
Marianne Farkas, Director of Training, Center for Psychiatric Rehabilitation	Peer Support for University Students with Psychiatric Disabilities (Subcontract via NAMI Support Technical Assistance & Resource Center)	HSS/SAMHSA	\$84,075
Mahasweta Girgenrath, Assistant Professor of Health Sciences	A Combinatorial Strategy to Treat the Pathology of Congenital Muscular Dystrophy	MDA	\$45,000
Mahasweta Girgenrath, Assistant Professor of Health Sciences	A Combinatorial Strategy to Treat the Pathology of Congenital Muscular Dystrophy	MDA	\$11,250
Christine Helfrich	Homeless Mentally Ill: Strategies for Maintaining Residential Stability	Dept. of Education	\$44,629
Norman Hursh, Associate Professor of Rehabilitation Counseling	The Boston Connects Model of Student Support: Expanding Technical Assistance and Evaluation (subcontract via Boston College)	Mathile Family Foundation	\$21,094
Karen Jacobs, Clinical Professor of Occupational Therapy	University Students' Laptop Computer Use	OERC	\$30,000
Karen Jacobs, Clinical Professor of Occupational Therapy	University Students and Their Notebook Computer Use: Phase II	OERC	\$25,500
Susan Kandarian, Professor of Health Sciences	Role of IKK Signaling in Skeletal Muscle Atrophy (D. Van Gammeren)	HHS/NIH/NIAMS	\$52,074
Susan Kandarian, Professor of Health Sciences	Regulation of Gene Expression in Skeletal Muscle: NF-kB Signaling in Atrophy	HHS/NIH/NIAMS	\$349,375

Principal Investigator	Project Title	Agency	Funds This Action
Susan Kandarian, Professor of Health Sciences	Identification of NF-kappaB Target Genes in Skeletal Muscle During Cachexia	HHS/NIH/NIAMS	\$209,625
Julie Keyser, Assistant Professor of Physical Therapy	Disability Risk Factors Among Older Adults With Knee Arthritis	Arthritis Foundation	\$90,000
Gerald Kidd, Jr., Professor of Speech, Language & Hearing Sciences	Central Factors in Auditory Masking (In conjunction with Hearing Research Center)	NIDCD	\$432,206
Gerald Kidd, Jr., Professor of Speech, Language & Hearing Sciences	Core Center Grant—Sound-Field Laboratory (Core 1)	NIDCD	\$182,839
Larry Kohn, Coordinator of Development, Center for Psychiatric Rehabilitation	Training for the Future (Subcontract via Comm. of Mass./Rehabilitation Commission)	U.S. Dept of Education	\$66,000
Melanie Matthies, Associate Professor of Speech, Language & Hearing Sciences	Constraints and Strategies in Speech Production	NIDCD	\$35,196
Melanie Matthies, Associate Professor of Speech, Language & Hearing Sciences	Effects of Hearing Status on Adult Speech Production	NIDCD	\$68,690
Kathleen Morgan, Professor of Health Sciences	Regulation of Contraction of Blood Vessels	NHLBI	\$317,180
Kathleen Morgan, Professor of Health Sciences	Dynamics of the Vascular Smooth Muscle Cytoskeleton	NHLBI	\$1,303,738
Kathleen Morgan, Professor of Health Sciences	Subcellular Organization of Signaling in Smooth Muscle	NHLBI	\$678,331
Kathleen Morgan, Professor of Health Sciences	Characterizing a Novel Branch of the Signaling Network that Regulates Vascular Smooth Muscle Contraction (S. Vetterkind)	American Heart Association	\$38,000
Patricia Nemeč, Clinical Associate Professor of Rehabilitation Counseling	Long Term Training in Rehabilitation for Individuals With Psychiatric Disabilities	Dept. of Education	\$41,951
Deborah Nicoletti, Marianne Farkas, Center for Psychiatric Rehabilitation	People Encountering People: Curricula to Shift the Paradigm for Master's Level Rehabilitation Counseling Students	Dept. of Education	\$100,000
Gael Orsmond, Associate Professor of Occupational Therapy	Impact of Parenting Adolescents and Adults with Autism (U. of Wisconsin Subcontract)	NIH	\$180,247
Paula Quatromoni, Assistant Professor of Health Sciences	Evaluating IMOVE: An Environmental Intervention to Promote Healthy Eating in Middle-School Children from Massachusetts Communities at High Risk for Childhood Obesity	Charles Hood Foundation	\$150,000
Paula Quatromoni, Assistant Professor of Health Sciences	Energy Density, Adoption of Healthy Lifestyle Behaviors, and Metabolic Disease in a Population-Based Cohort	Unilever UK Central Resources, Ltd.	\$69,280
Maria Restrepo-Toro, Center for Psychiatric Rehabilitation	Center for Capacity Building on Minorities with Disabilities Research (Subcontract via University of Illinois/Chicago)	U.S. Dept. of Education	\$22,300
E. Sally Rogers, Director of Research Activities, Center for Psychiatric Rehabilitation	RRTC on Recovery and Recovery-Oriented Psychiatric Rehabilitation for Persons With Long Term Mental Illness	U.S. Dept of Education	\$750,000

2007-2008 Grant Awards *(Continued)*

Principal Investigator	Project Title	Agency	Funds This Action
E. Sally Rogers, Director of Research Activities, Center for Psychiatric Rehabilitation	Instrument to Measure Recovery Promoting Competence Among Spanish Speaking Mental Health Providers	U.S. Dept. of Education	\$149,908
Zlatka Russinova, Senior Research Associate, Center for Psychiatric Rehabilitation	Advanced Research Training Program In Psychiatric Rehabilitation	U.S. Dept. of Education	\$149,986
Eliot Saltzman, Associate Professor in Physical Therapy & Athletic Training	Collaborative Research: Landmark-Based Robust Speech Recognition Using Prosody-Guided Models of Speech	National Science Foundation	\$44,663
Leher Singh, Associate Professor of Speech, Language & Hearing Sciences	Prelexical Predictors of Word Learning	NIDCD	\$79,341
Leher Singh, Associate Professor of Speech, Language & Hearing Sciences	How to Grow a Lexicon: Word Discovery in Infancy	NICHHD	\$14,252
Louise Stanczak, Doctoral Student in Speech, Language & Hearing Sciences	Individual Differences In Lexical and Syntactic Ambiguity Resolution	NIDCD	\$26,747
Robert Wagenaar, Professor of Physical Therapy & Athletic Training	Body-Area Instrumentation (Lift Monitor) for Avoidance of Workplace Injury (in conjunction with Center for Information and Systems Engineering)	The Hartford Fire Ins. Co.	\$125,016
Robert Wagenaar, Professor of Physical Therapy & Athletic Training	The Effects of Anterior Cruciate Ligament Reconstruction on Gait Coordination: A Dynamics Perspective (K. Lam)	NATA Research & Foundation	\$2,500
Gloria Waters, Dean, Professor of Speech, Language & Hearing Sciences	Assessment of Comprehension Skills in Older Struggling Readers	U.S. Dept. of Education	\$313,756
Gloria Waters, Dean, Professor of Speech, Language & Hearing Sciences	Language Comprehension in Aging and Alzheimer's Disease	NIA	\$506,280
Gloria Waters, Dean, Professor of Speech, Language & Hearing Sciences	Functional Neuroimaging Studies of Syntactic Processing (Subcontract via Mass. General Hospital)	NIDCD	\$39,270

DUDLEY ALLEN SARGENT RESEARCH FUND

The Dudley Allen Sargent Research Fund helps graduate students, faculty, and alumni of Sargent meet the expenses of research projects. Initiated in 1966 by the class of 1921 and supported by contributions from alumni and friends as well as by indirect funds from sponsored research, this fund helps foster innovation in health care research. Listed below are the 2008 recipients.

Paula Quatromoni, Assistant Professor of Health Sciences	CYCLE Kids: a Pilot Study to Deliver and Evaluate an Exercise Intervention to School-Age Children in Urban Schools
Dr. Naira Matevosyan, Center for Psychiatric Rehabilitation	Reproductive Health in Women with Serious Mental Illnesses: Client and Provider Perspectives
Dr. Marie Mesidor, Post Doctoral Fellow	The Relationship Between Mothers with Severe Mental Illness and Their Daughters
Mario Munoz, Doctoral Student, Rehabilitation Science Program	The Association Between Motor Coordination and Fitness in Hispanic Children

A New MSC:

Renovation Draws to a Close

The final touches are being added to the newly renovated, LEED-certified George K. Makechnie Study Center (MSC), due to be completed by the start of Fall 2008 classes. A support facility that provides media production resources for students and faculty as well as a state-of-the-art computer laboratory available for student use, the MSC is a cutting-edge study center for BU Sargent College students.

The center's resources will include a video-editing suite and media-viewing facilities; 11 computer workstations; 4 soundproof study rooms; 55 seats, and an additional, larger seminar/group work room. Technical support and instruction will also be offered, along with media support for the BU Sargent College community.

Construction has commenced on the last and more cosmetic touches, bamboo counters and glass walls. The result of all this hard work will be a modern study center filled with natural light.

"We are delighted with the finished product. It is not only much more functional than the previous space, but also very attractive," said Dean Gloria Waters. "The new study center will be an excellent resource for everyone in the Sargent community: students, faculty and staff."





**Dori Hutchinson
& Larry Kohn**

Teaching Skills

For 25 years, Dori Hutchinson, ScD, Director of Services, and Larry Kohn, MS, Director of Development, have created, researched, and funded innovative recovery programs at BU Sargent College Center for Psychiatric Rehabilitation (CPR) to help people with serious psychiatric illnesses to live, learn, and work successfully in their communities.

CPR's service division offers a range of recovery-oriented programs that focus on developing the skills and supports people need to lead healthy lives as students, parents or family members, workers, and community residents. Using an adult education model that is embedded in the principles of psychiatric rehabilitation and public health, participants, known as "students," choose from an array of courses that raise awareness, teach information and skills, and develop support strategies for role transformation.

Services include the Recovery Education Program, which offers 25 courses per semester focusing on health, personal and career development, as well as "Training for the Future," which prepares students for employment with intensive computer and work-readiness courses. In addition, the Services Division offers individual services to people who want one-to-one support in achieving goals.

The Services Division is staffed by rehabilitation professionals, many of whom have graduated from Sargent's Department of Rehabilitation Counseling and Boston University's School of Social Work. In addition, the Services Division is a sought-after internship site for BU Sargent College graduate students and graduate students of other colleges within BU.

"Our mission is to create programs that promote recovery from the consequences of a serious psychiatric disability, including poverty, unemployment, disrupted education, and poor health. We offer programs that develop people's readiness to change their primary role from that of a mental health client to that of a student, worker, and community member," explained Hutchinson.

A unique aspect of the Services Division is its collaborative relationships with other

for Living

A Full Life

Boston University schools and departments. These collaborations—and those with other Sargent College programs—have enabled Hutchinson and Kohn to develop cutting-edge rehabilitation programs that are helping to change the mental health field.

The Center has worked with Sargent College's Nutrition & Fitness Center to develop a nutrition health and wellness program for "CPR" students. In addition, the Sargent Exercise program worked with the Center to develop an exercise regimen for people with mental illness. The Center also serves as an important field placement for Sargent undergraduate and graduate Occupational Therapy students.

In 2007, the Center collaborated with the School of Theology and Associate Dean for Academic and Administrative Affairs John Berthrong to develop a course called *Kindred Spirits*. The course teaches students about the role animals can play in helping people recover and was developed based on evidence-based practices in animal-assisted interventions. CPR teacher Marjorie Jacobs is aided by graduate theology students and Micah, her 26-pound poodle. During class, Micah demonstrates her uncanny ability to reach out to students who are stressed, sad, or in need of unconditional love and acceptance.

The Department of Physical Education, Recreation & Dance (PERD), located in FITREC at Boston University, has also collaborated with the Services Division for 20 years. PERD, under Executive Director Warin Dexter's leadership and with the support of Assistant Director of Athletic Facilities Management Alan Weinberger, has provided space and courses that promote the physical well-being of students in the Services Division. Physical health is often impacted when people are treated for mental health issues,

resulting in additional co-morbidity such as diabetes, hypertension, and cardiovascular disease. Physical health interventions, such as those available at FITREC, are critical to helping people live healthier lives so they can learn and work successfully.

Another initiative within the Services Division is an art gallery featuring artwork by people in recovery and people who believe in recovery from mental illnesses. Each semester a new artist is exhibited, providing an opportunity for the University community, the mental health community, and the greater community to collaborate through art to increase understanding of mental health issues and reduce the stigma associated with them. Last summer's exhibit featured the oil paintings of Reynold Poisson, a successful Haitian-born artist who lives with depression. The gallery is located on the walls of CPR's Services Division and is open from 10 a.m. to 3 p.m. daily.

The Services Division provides recovery scholarships to all students to ensure everyone has an opportunity to access these innovative services regardless of their financial status. Kohn and Hutchinson seek funding from private foundations and donors, which allows them the freedom to be innovative and progressive. As one student said, "When I came to the center I was hoping...all I had was hope. I came here and I found people who were sensitive to my feelings and who tell me that my feelings are real and have meaning. This program has been a catalyst in helping me communicate and trust in the world again...and has given me hope that I can take the next step in my life."

With the help of their partners, CPR continues to innovate to help improve the lives of students enrolled in both the Recovery Education Program and Boston University.



Left: Director of Services Dori Hutchinson and Director of Development Larry Kohn of BU's Sargent College Center for Psychiatric Rehabilitation with Kindred Spirits poodle Micah. Above, top to bottom: Patients involved in the physical health intervention program in FitRec at Boston University; CPR teacher Marjorie Jacobs and her poodle Micah; Reynold Poisson, CPR artist and student, whose art is on the walls of CPR.



A New HOME: Using Research to Better Lives

Christine Helfrich

In a Chicago YMCA, 86 once-homeless people are enjoying a stable life off the streets and out of the shelters, as they pay rent, keep house, and build community.

The 86 are part of an occupational therapy study that imparted life skills through empowerment and practical training, including experiences such as opening a bank account and joining a crime-watch group.

"The results show promise beyond curbing evictions," said Christine Helfrich, an assistant professor of occupational therapy.

"It's really an exciting project," said Helfrich. "Our overall observations are that people's life skills are definitely improving and eviction rates are decreasing."

Recent federal efforts to combat homelessness have focused on moving people into permanent homes. The moves are important, but without preparation they often prove unsuccessful because clients need to refresh rusty skills and build new ones to adapt. Helfrich's study has tackled the challenges

that emerge in the housing transition for people with a history of homelessness and sometimes mental illness, substance abuse, domestic abuse, and other trauma. It is unique because it tapped historically homeless clients from its design and included them in focus groups where they were consulted on the biggest obstacles in adjusting to independent residential life after being homeless.

Funded by a \$450,000 grant from the National Institute of Disability and Rehabilitation Research, the study was a demonstration of cost-effectiveness, especially when considering the cost of these services versus a shelter, hospital, or other treatment. Helfrich started it as a faculty mem-

ber at the University of Illinois at Chicago, and when the time came to complete her research, she brought the

grant with her to BU Sargent College.

The study has been so successful that Helfrich is seeking additional funding for a large nationwide study that would broaden the program to other settings, such as a group home, a day program, and a shelter, to further demonstrate its effectiveness.

"People need the skills to stay in housing," she said. "And this would help not only the people who are homeless, it would help the staff working in shelters and other settings improve their track record of placements, which helps encourage more landlords to accept people."

The study also exceeded expectations for the retention of the participants, all Emergency Housing Program participants from Northwestern Memorial Hospital or single-room occupancy residents of the Lawson House YMCA.

"No one had really done a study like this," Helfrich said. "We thought we'd lose a lot more people by attrition and we were really interested in looking at feasibility issues."

At the beginning, each client was thoroughly assessed for four to six hours on cognitive and motor function, substance abuse, trauma history, and readiness to change, Helfrich said. Then, clients each received a manual with the material to be covered in classes on money management, nutrition, community safety, cleanliness, and how to take care of themselves and their rooms. The life skills that were shared in the groups, however, came from group members themselves, who were considered experts based on their own experiences transitioning from

homelessness. That method of instruction, based on social learning theory, was found to be more effective than having the therapist or another authority figure serve as the expert instructor, said Helfrich.

The classes covered practical information such as how to eat on modest means. A group member, for example, pointed out the locations of soup kitchens and food pantries and detailed their practices, such as the three dozen eggs that one place gives to a single client, said Helfrich.

Groups also went to a local bank that agreed to let the clients open accounts with no fees. When homeless, the clients had prior bad experiences with banks and were wary of entering, but a bank official welcomed them, walked them through procedures, and some of them even signed up for direct deposit and other stabilizing programs.

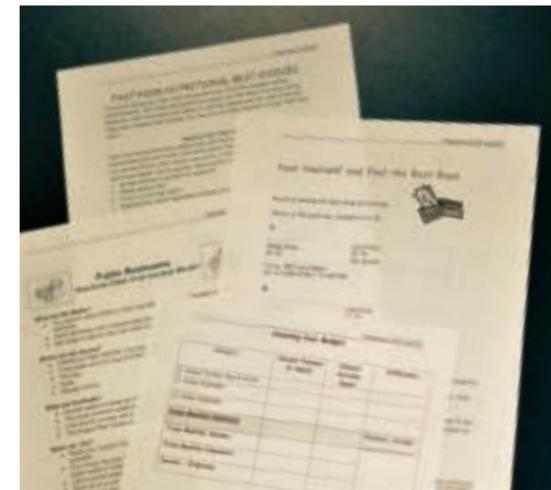
The study also sought to create a positive experience with police, but no one showed up when they were supposed to go to a police station. So, they tried a neighborhood police beat meeting. At first, the clients were too intimidated to speak at the meeting in the YMCA's upscale neighborhood, but after they saw that neighbors shared an interest in reducing drug dealing and street crime, they chimed in. Soon, the clients were supplying valuable information to police, who stepped up patrols to good effect.

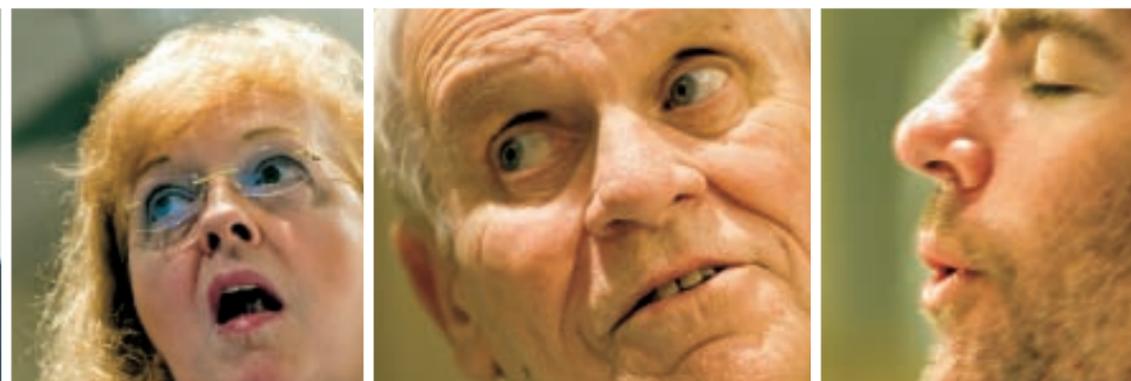
Throughout the study, participants had individual meetings with researchers to reevaluate the study and their progress; they also met three and six months after the study. Now, researchers are analyzing results and the role that mental illness diagnoses, history of homelessness, trauma, and abuse play in how well participants fared in the study.

At the end, certificates were presented to those who completed the study, and many bought frames and hung the framed diplomas in their very own rooms.

"They really wanted something to show for what they accomplished," she said. "They took a lot of pride in completing it."

Above Left: Christine Helfrich, assistant professor in the Department of Occupational Therapy at BU Sargent College. Right: Helfrich's study helps once-homeless people enjoy a stable life off the streets. Clients receive instruction on cleanliness and safety and relearn how to take care of themselves.





Jerome Kaplan & Elizabeth Hoover

THE ELUSIVE WORD:

BRIDGING *the* GAP BETWEEN MIND

Consider what it would feel like if the last word you said tonight was the last word you would say with ease. Imagine waking up with only a fraction of your ability to communicate.

For those who live with the communication disorder aphasia, this is their reality.

"Aphasia by definition is a very isolating condition," said Jerome Kaplan, MA, CCC/SLP, clinical supervisor at the Aphasias Community Resource Center (ACRC) at Boston University College of Health & Rehabilitation Sciences: Sargent College. "It is devastating."

Aphasia is a communication disorder which impairs the brain's ability to process speech, language, reading, or writing. The disorder is acquired when the area of the brain that is responsible for these functions is damaged, most often as a result of a stroke or head injury but sometimes as a result of other neurological disorders such as brain cancer.

There are many forms of aphasia, including nonfluent and fluent. While fluent aphasia is characterized by a more normal flow of words but with impaired ability to comprehend, non-fluent aphasia is characterized by effortful speech output in which the individual struggles to produce single words or short phrases. For example, an individual may say "tackle" when he means to say "apple." Or, instead of saying, "I'd like eggs and bacon for breakfast," he may say, "Eggs...bacon." The differences in symptoms are due to the different locations of neurological damage.

Because there are many different types and degrees of aphasia it is important to distinguish among them in order to provide optimal treatment.

According to the National Institute on Deafness and Other Communication Disorders, the disorder affects about one million people in the United States.

Established in 2006, the Aphasias Community Resource Center at BU Sargent College offers support, socialization, education, and advocacy to individuals, as well as their families and friends, touched by aphasia and related disorders.

Founded by Kaplan in 1990, the Aphasias Community Group (ACG) met at Spaulding Rehabilitation Hospital before it relocated to BU Sargent College in the fall of 2006, when group programs were first offered at the ACRC. Prior to that, BU had offered therapy for those with aphasia; the move to Sargent and the birth of the ACRC solidified a more comprehensive resource.

Each semester, the center offers up to twelve groups which focus on topics such as conversation, books, newsletters, public speaking, photography, writing, film, and computers.

Kaplan said he has seen the positive effects that participating in these groups—as well as the monthly community group—can have on individuals.

"I've seen so many examples of people participating in our groups who afterwards are so much more active and assertive and take greater communicative risks," he said.

He described one woman who used to avoid communication when she was approached by struggling to say, "Never mind, ask someone else." Now, after participating in the groups, she initiates more conversation and has become more responsive.

Another woman who has taken the Toastmasters Class at the center was shy and nervous about public speaking after her stroke, said Elizabeth Hoover, MS, CCC/SLP, and a clinical supervisor of the ACRC. However, her confidence blossomed through the group and she was able to return to her role as a lector at her church.

The monthly meetings of the ACG also give those with aphasia a place to communicate with others who share the isolation and loneliness that often accompanies the disorder, and also offers family members a place to talk about the loss of communication in their loved ones.

As with any loss, there can be an aspect of grief that accompanies a disorder such as aphasia, and the groups offer those living with it a place to connect with others who understand, Hoover said.

"For some people it's tough to get out of the frustration and depression. The center gives those with aphasia a chance to connect with people who have lived through it, to realize they can make improvements and inspire and motivate each other," she explained.

Kaplan echoed the importance of community in coping with the disorder, noting that the word "community" is part of both the Aphasias Community Resource Center and the Aphasias Community Group.

"Aphasia takes away the ability to use the tools of language to advocate for oneself," Kaplan said. "We offer programs and services which foster a sense of belonging to a community."

Both Kaplan and Hoover noted that Dean of BU Sargent College Gloria Waters, whose research is in the area of aphasia,

and MOUTH

has played an important and integral role in developing the resource center.

The Center provides an excellent opportunity for graduate students in the Speech-Language Pathology program to obtain experience in working with aphasia clients and to interact with them and their families.

"You can definitely improve their abilities," says Jen Maietta ('08). "In the writing group, you can see people improve, even over one semester. People who were leaving out whole words from their sentences start to include them. They also conjugate verbs correctly and keep the right endings on words. It's amazing to see."

The Aphasias Community Resource Center offers courses each semester for a modest fee; the Aphasias Community Group meets once a month and is free. For more information about the center or specific courses, visit www.bu.edu/sargent/centers/clinical/aphasia/.

The work of the Aphasias Community Resource Center is supported in part by a grant from the Boston Foundation and also by a generous gift from Mynde S. Rozbruch Siperstein ('78) and Gary S. Siperstein (SMG'08), which funded the Siperstein Aphasias Community Resource Center.



Top Left: Jerome Kaplan and Elizabeth Hoover, both clinical supervisors in the Aphasias Community Resource Center at BU Sargent College. The center offers support, socialization, education, and advocacy to individuals—as well as family and friends who are touched by aphasia and related disorders. It also serves an important role as a training site for students in Sargent's Speech-Language Pathology program.



COMMUNITY PROJECTS

It's hard to say who benefited more from BU Sargent College professors' hands-on teaching styles last year—the students who gained invaluable experience, or the people they helped. The following stories highlight four outstanding Sargent community outreach programs.

PROVIDING FREE HEARING SCREENINGS

Hearing loss can dramatically affect academic performance, yet many schools lack the manpower necessary to screen students. Ann Dix, Clinical Assistant Professor of Speech, Language & Hearing Sciences, runs the Boston University Hearing Screening Program, which provides free screenings in schools throughout greater Boston.

Last year, Dix's first-year Speech-Language Pathology graduate students screened approximately 1,000 children in fourteen schools and preschools, including the Boston University Children's Center. They examined ear structure, evaluated eardrum mobility, and conducted hearing tests. They also created detailed reports for children who failed the test.

Erica Joseffy, MS '09, learned to adapt the test for her audience. "It is difficult to determine whether preschoolers misunderstand our directions or can't hear. To help eliminate this confusion, we played together. The children held blocks by their ears and put them down when they heard a tone. Once the group mastered this skill, we tested the children individually," Joseffy explained.

One of the sites that benefited from the screenings was Dearborn Academy, a K-12 public school for children with emotional or behavioral issues. "A lot of our children do not receive proper medical care. The kids can be challenging but the Boston University students are incredibly professional and have done wonders with them," said School Nurse Diane Melia.

HELPING STUDENTS OVERCOME LITERACY PROBLEMS

Clinical Assistant Professor in Speech, Language & Hearing Sciences Kerry Howland and her graduate students provide services to students at risk for language and literacy problems at the Baldwin School, a pilot school that enrolls a diverse group of chil-

dren, including many who are learning English.

Howland's students worked in teams of two with pre-kindergarten through first grade students on phonological awareness, sound symbol correspondence, and early decoding and comprehension skills.

"Phonological awareness is breaking words into sounds followed by sounding out words—all early reading skills. One training technique the children loved involved feeding puppets. For instance, the bear puppet only eats foods that begin with 'B's. They loved to tell whether he should eat an item or spit it out," explained Howland.

LEARNING

Shannon Rice, MS '09, recalled her experience teaching sound symbol correspondence using the Telian-CAS Lively Letters Program. "I showed a card with an 'l' that looked like a person shooting a basketball alongside a crowd cheering 'Get it in!', a phrase that focused on the 'l' sound. The cards simplified the connection between letters and their sounds for the children."

The graduate students learned to think on their feet and to tailor activities to meet the needs of their students while the children declared that they learned to read.

HELPING HEAL THE HOMELESS

An integral component of the undergraduate Health Science Program is the popular four-credit practicum managed by full-time practicum instructor Shelley Brown. Students apply the knowledge, ethics, and skills learned in the classroom in a supervised health care setting.

Eileen O'Keefe, MD, MPH, director of the Undergraduate Health Science Program, toured the Boston Health Care for the



While Helping Others

Homeless Program (BHCHP) with her students last year and was so impressed she added BHCHP to the partner practicum list. Shanelle County, BS Health Science and Minor in Public Health '08, was the first student to work with BHCHP.

Under RN supervision, County assessed the feet, blood sugar levels, and needs of diabetic patients. She worked with the team to provide patients with footwear, educational materials, and medication. She was also responsible for patient documentation—a skill she learned through her prior athletic training curriculum at BU.

Before she began her practicum, County planned to focus on health care management versus a clinical option. "But once I realized the impact I made on my patients' lives... these people who just wanted to know somebody cared for them...I decided to combine the two fields. I am applying to nursing and physician assistant programs," she said.

EDUCATING POLITICIANS ABOUT THE BENEFITS OF OT

Occupational Therapy (OT) helps people participate to their fullest potential in daily life, but many people are unaware of its benefits. Karen Jacobs, clinical professor, Occupational Therapy, worked with State Representative Louis Kafka to sponsor OT Day to educate legislators at the State House last April.

Jacobs recruited her graduate students to demonstrate OT's role in six areas: Mental Health, Work and Industry, Productive Aging, Children and Youth, Rehabilitation, and Health and Wellness. Thirteen teams developed interactive displays and hands-on educational experiences.

Roxanne Chess' (MS '09) team enticed visitors to their booth with cookies. The catch? They could only indulge if they were willing to spread icing on the cookie with a non-dominant hand. Once visitors were busy icing baked goods, the education began.

"Many people did not realize the lack of services and equal opportunity individuals face in Massachusetts. A number of state representatives came back to our table with additional questions and thanked us for educating them about the issue. We really learned how to reach out to people in interactive ways to demonstrate how important OT is to rehabilitation," said Chess.

Jacobs and Kafka will join forces again next year to continue the education process.

Above: Erica Joseffy, a graduate student in the Master of Science in Speech-Language Pathology program. Left: Ann Dix, Clinical Assistant Professor of Speech, Language & Hearing Sciences, instructs Erica on the proper way to conduct the hearing screening. Erica conducts free hearing screenings for children at the BU Children's Center.



Tahari James

A WELL-BALANCED ACT: *Academics and Athletics*

Balancing schoolwork, practice, game travel, and everything else can be challenging for student athletes. But All-American athlete Tahari James, a senior at Boston University College of Health & Rehabilitation Sciences: Sargent College and star member of the BU women's track and field team, make it look not only doable, but easy.

"I was very happy to end my last indoor season on such a high note."

This hectic lifestyle is not foreign to James, who was also a member of the track and field team in high school and earned a scholarship from Boston University to join their team. James, who says she feels "really blessed to be surrounded by people who make this sport so enjoyable," competed in her final indoor NCAA Championship in March 2008 and took sixth place in the triple jump, beating school and personal

records and earning her All-American athlete honors.

"After I heard my ranking going into the finals, I knew that the All-American honor was right there," explains James. "I was thrilled about being named All-American—

my coach always told me that I had the capacity to do it. I was very happy to end my last indoor season on such a high note."

James is a health sciences major at BU Sargent College and a public health minor at BU School of Public Health and is also a member of both the Student Athletic Advisory Council and the Inner Strength Gospel Choir. Doing it all "comes down to time management and staying on top of everything," she says, adding that she wouldn't change a thing.

After spending the past three years at BU, James is expected to graduate in May 2009.

Tahari, a health science major at BU Sargent College and a public health minor at BU School of Public Health, does a great job of balancing an All-American track career and academics.



Faculty In Print

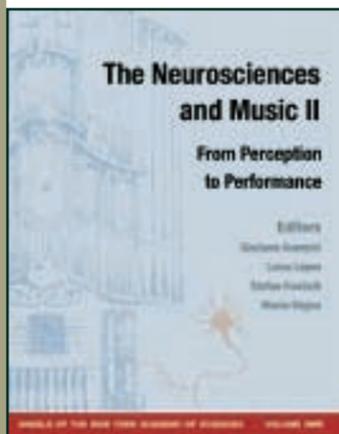
A selection of publications written by faculty during the 2007-2008 academic year:



Barbas, H. (2007). Specialized Elements of Orbitofrontal Cortex in Primates. *Ann N Y Acad Sci*, 1121: 10-32.

Barbas, H. and Zikopoulos, B. (2007). The Prefrontal Cortex and Flexible Behavior. *The Neuroscientist*, 13: 532-545.

Barbas, H. (2007). Flow of Information for Emotions Through Temporal and Orbitofrontal Pathways. *J. Anatomy*, 211: 237-249.



Ben-Sasson, A., **Cermak, S., Orsmond, G.I.**, Tager-Flusberg, H., Carter, A.S., Kadlec, M.B., and Dunn, W. (2007). Extreme Sensory Processing Behaviors in Toddlers With Autism Spectrum Disorders. *American Journal of Occupational Therapy*, 61, 584-592.

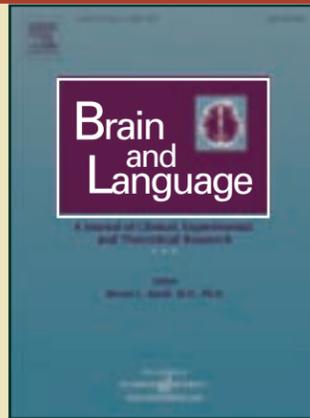
Ben-Sasson, A., **Cermak, S.A., Orsmond, G.I.**, Carter, A.S., and Fogg, L. (2007). Indicators of Sensory Defensiveness and Anxiety in Toddlers: Perspectives of Occupational Therapists and Psychologists. *Infant Mental Health Journal*, 82, 1-23.

Berger, S. and Kaldenberg, J. (2008). Complexities Associated with Aging. In S. Copolla, S. Elliott, and P. Toto (Eds.), *Strategies to Achieve Gerontological Excellence (SAGE) in Occupational Therapy Practice* (199-222). Bethesda, MD: AOTA Press.

Berger, S. (2008). Client Education. In E.B. Crepeau, **E.S. Cohn**, and B.A.B. Schell (Eds.), *Willard & Spackman Occupational Therapy* (11th ed. 418-425). Philadelphia: Lippincott Williams and Wilkins.

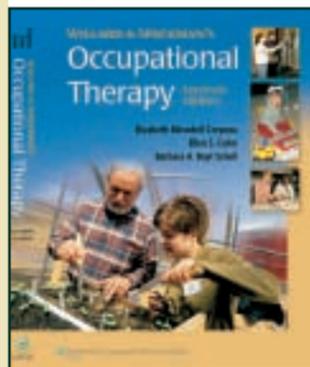
Coady, J.A., Evans, J.L., Mainela-Arnold, E.M., and Kluender, K.R. (2007). Children With Specific Language Impairments Perceive Speech Most Categorically When It Is Both Natural and Meaningful. *Journal of Speech, Language and Hearing Research*, 50, 41-57.

Caplan, D., Stanczak, L., and Waters, G. (2008). Syntactic and Thematic Constraint Effects on BOLD Signal Correlates of Comprehension of Relative Clauses. *Journal of Cognitive Neuroscience*, 20, 643-656.



Caplan, D., Chen, E., **Waters, G.** (2008). Task-Dependent and Task-Independent Neurovascular Responses to Syntactic Processing. *Cortex*, 44, 257-275.

Caplan, D., Waters, G., DeDe, G., Michaud, J., & Reddy, A. (2007). A Study of Syntactic Processing in Aphasia I: Behavioral (Psycholinguistic) Aspects. *Brain and Language*, 101, 103-150.



Cohn, E.S. (2008). Team Interaction Models and Team Communication. In E.B. Crepeau, **E.S., Cohn**, and B.A.B. Schell (Eds.), *Willard & Spackman's Occupational Therapy*, 11th ed. Philadelphia: J.B. Lippincott Co.

Cohn, E.S., and Henry, A.D. (2008). Care-Giving and Child Rearing. In E.B. Crepeau, **E.S., Cohn**, and B.A.B. Schell (Eds.), *Willard & Spackman's Occupational Therapy*, 11th ed. Philadelphia: J.B. Lippincott Co.

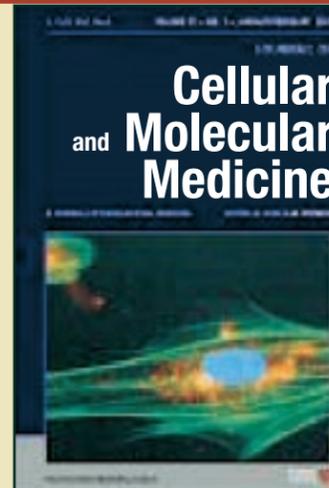
Coster, W. and Khetani, M.A. (2008). Measuring Participation of Children With Disabilities: Issues and Challenges. *Disability and Rehabilitation*, 30, 639-648.

Coster, W., Haley, S.M., Jette, A., Tao, W., and Siebens, H. (2007). Predictors of Basic and Instrumental Activities of Daily Living Performance in Persons Receiving Rehabilitation Services. *Archives of Physical Medicine and Rehabilitation*, 88, 928-935.

Coster, W., Haley, S.M., Ni, P.S., Dumas, H.M., and Fragala-Pinkham, M.A. (2008). Assessing Self-Care and Social Function Using a Computer Adaptive Testing Version of the Pediatric Evaluation of Disability Inventory. *Archives of Physical Medicine and Rehabilitation*, 89, 622-629.

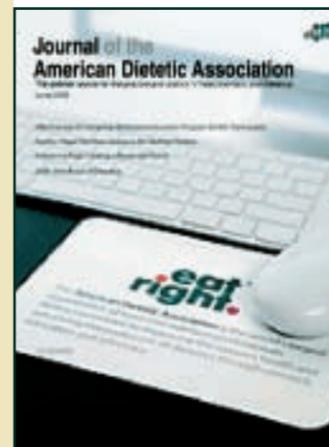
Coster, W.J. (2008). Curricular Approaches to Professional Reasoning for Evidence-based Practice. In B.A. Schell and J.W. Schell (Eds.) *Clinical and professional reasoning in occupational therapy*. Baltimore: Lippincott Williams and Wilkins. 311-334.

Daunhauer, L., **Coster, W.J.**, Tickle-Degnen, L., and **Cermak, S.** (2007). Effects of Caregiver-Child Interactions on Play Occupations Among Young Children Institutionalized in Eastern Europe. *American Journal of Occupational Therapy*, 61, 429-440.



Ellis, T., Rork, T., and Dalton, D. *Be Active: An Exercise Program for People with Parkinson's Disease*. American Parkinson's Disease Association. March 2008. In press.

Farkas, M., and **Anthony, W.A.** (2007). Bridging Science to Service: The Rehabilitation Research and Training Center Program. *Journal of Rehabilitation Research and Development*, 44(6), 879-892.



Fiala, J.C., Feinberg, M., Peters, A., and **Barbas, H.** (2007). Mitochondrial Degeneration in Dystrophic Neurites of Senile Plaques May Lead to Extracellular Deposition of Fine Filaments. *Brain Struct Funct*. 212(2): 195-207.

Ford, M.P., **Wagenaar, R.C.**, and Newell, K.M. (2007). Phase Manipulation and Walking in Stroke. *Journal of Neurological Physical Therapy*, 31, 85-91.

Gal, E., **Cermak, S.**, and Ben-Sasson, A. (2007). Sensory and Motor Issues and Intervention. In Gabriels and Hill (Eds.), *Autism: Beyond Early Intervention*. New York: Guilford. 95-123.

Gallant, C., Malek, S., **Morgan, K.G.** (2007). Focal Adhesion Signaling is Required for Myometrial ERK Activation and Contractile Phenotype Switch Before Labor. *J Cell Biochem*. 100(1): 129-40.

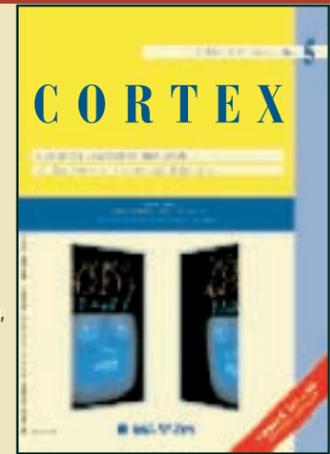
Gallun, F.J., **Mason, C.R.**, and **Kidd Jr., G.** (2007). The Ability to Listen with Independent Ears. *Journal of the Acoustical Society of America*, 122, 2814-2825.

Gallun, F.J., **Mason, C.R.**, and **Kidd Jr., G.** (2007). Task-Dependent Costs in Processing Two Simultaneous Auditory Stimuli. *Percept. and Psychophys.* 69, 757-771.

Gangopadhyay, S.S., Gallant, C., Sundberg, E.J., Lane, W.S., and **Morgan, K.G.** (2008). Regulation of Ca²⁺/calmodulin Kinase II by a Small C-terminal Domain Phosphatase. *Biochem J*. 412(3): 507-16.

Gavett, E. and Peaper, R. (2007). Critical Thinking: The Role of Questions. *Perspective on Issues in Higher Education*, 10, (1), 3-5.

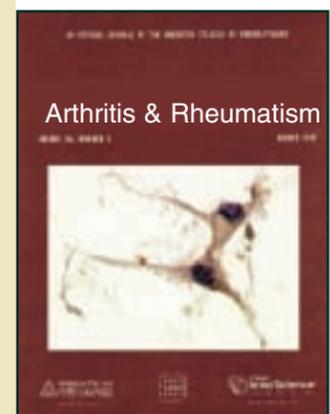
Gross, K.D., Niu, J., Zhang, Y.Q., Felson, D.T., McLellan, C., Hannan, M.T., **Holt, K.G.**, and Hunter, D.J. (2007). The Varus Foot and Hip Conditions In Older Adults. *Arthritis and Rheumatism*, 56, 2993-2998.



Hagner-Holler, S., Pick, C., **Girgenrath, S.**, Marden, J.H., and Burmester, T. (2007). Diversity of Stonefly Hexamerins and Implication for the Evolution of Insect Storage Proteins. *Insect Biochem Mol Biol*. 37(10): 1064-74.

Helfrich, C.A. and Beer, D. (2007). Use of the frstSTeP Screening Tool with Children Exposed to Domestic Violence and Homelessness: A Group Case Study. *Physical and Occupational Therapy in Pediatrics*, 27(2), 63-76.

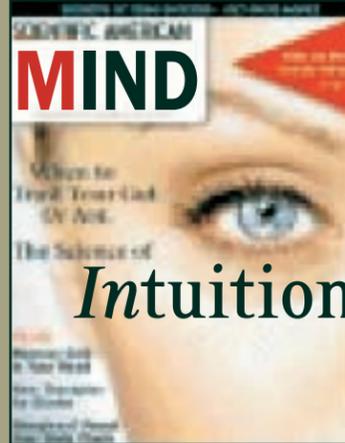
Helfrich, C.A., Fujuiira, G., and Rutkowski, V. (2008). Mental Health Characteristics of Women in Domestic Violence Shelters. *Journal of Interpersonal Violence*, 23, 437-453.



Faculty In Print

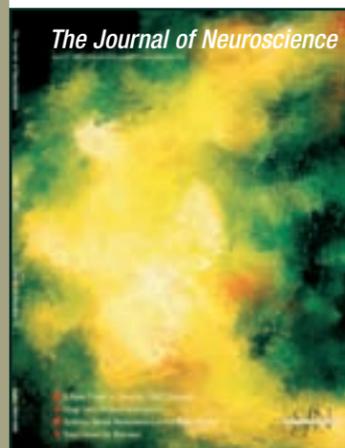
Continued

A selection of publications written by faculty during the 2007-2008 academic year:



Hilgetag, C.C. and **Barbas, H.** Why Does the Outer Surface of the Brain Have Folds? Response in: *Scientific American Mind*, June/July 2007, 86.

Holt, K.G., Saltzman, E., Ho, C.L., and Ulrich, B.D. (2007). Scaling of Dynamics in the Earliest Stages of Walking. *Physical Therapy*, 87, 1458-1467.



Hutchinson, D., Anthony, W.A., Massaro, J., and Rogers, E.S. (2007). Evaluation of a Combined Supported Education and Employment Computer Training Program for Persons with Psychiatric Disabilities. *Psychiatric Rehabilitation Journal*, 30, 189-197.

Jacobs, K. (Ed.) (2008). *Ergonomics for Therapists*. 3rd Edition. St. Louis: Mosby, Inc.

Jacobs, K., Lockhart, R., Chiang, H-Y, and O'Hara, M. (2007). Bookbags for children. In R. Lueder and V. Rice (eds.), *Ergonomics for Children ...Designing Products and Places for Toddlers to Teens*. London and New York: Taylor and Francis.

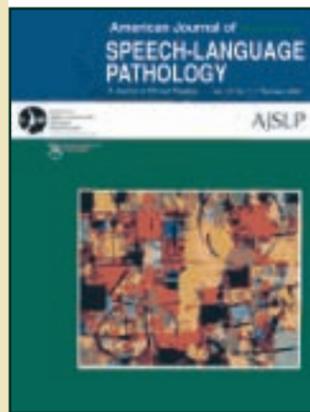
Kidd Jr., G., Mason, C.R., Richards, V.M., Gallun, F.J. and Durlach, N.I. (2007). "Information masking" in Auditory Perception of Sound Sources. In Yost, W.A., Popper, A.N., and Fay, R.R. (eds.) New York: Springer Science+Business Media, LLC, 143-190.

Koncarevic, A., **Jackman, R.W.,** and **Kandarian, S.C.** (2007). The Ubiquitin-Protein Ligase Nedd4 Targets Notch1 in Skeletal Muscle and Distinguishes the Subset of Atrophies Caused by Reduced Muscle Tension. *FASEB J.* 21(2): 427-37.

Lahav, A., **Saltzman, E.,** and Schlaug, G. (2007). Action Representation of Sound: Audiomotor Recognition Network While Listening to Newly Acquired Actions. *Journal of Neuroscience*, 27, 308-314.



Lane, H., Denny, M., Guenther, F., Hanson, H., Marrone, N., **Matthies, M.,** Perkell, J., Stockmann, E., Tiede, M., Vick, J., and Zandipour, M. (2007). On the Structure of Phoneme Categories in Listeners with Cochlear Implants. *Journal of Speech, Language and Hearing Research*, 50, 2-14.



Lane, H., **Matthies, M.L.,** Guenthe, R.H., Denny, M., Perkell, J.S., Stockmann, E., Tiede, M., Vick, J., and Zandipour. (2007). Effects of Short-and Long-Term Changes in Auditory Feedback on Vowel and Sibilant Contrasts. *Journal of Speech, Language and Hearing Research*, 50, 913-927.

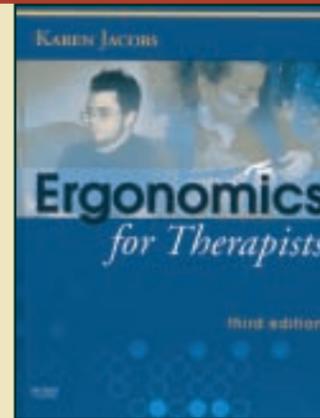
May-Benson, T. and **Cermak, S.** (2007). Development of an Assessment of Ideational praxis. *American Journal of Occupational Therapy*, 61(2), 148-153.

Munevar, S., Gangopadhyay, S.S., Gallant, C., Colombo, B, Sellke, F.W., **Morgan, K.G.** (2008). CaMKII287 and T305 Regulate History-Dependent Increases in Alpha Agonist-Induced Vascular Tone. *J Cell Mol Med.* 12(1): 219-26.



Must, A., **Bandini, L.G.,** Tybor D.J., Phillips, S.M., Naumova, E.N., Dietz, W.H. (2007). Activity, Inactivity and Screen Time in Relation to Weight and Fatness Over Adolescence in Girls. *Obesity*, 15:1774-1781.

Must, A., **Bandini, L.G.,** Tybor, D.J., Janssen, I., Ross, R., and Dietz, W.H. (2008). Behavioral Risk Factors in Relation to Visceral Adipose Tissue Deposition in Adolescent Females. *Int J Ped Obes.* 3: 28-36.



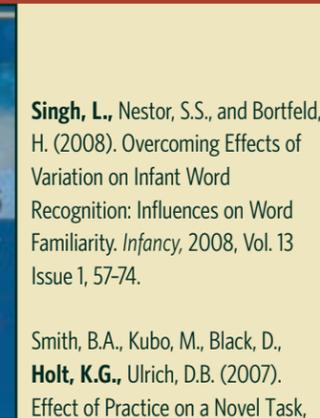
Orsmond, G.I. and Seltzer, M.M. (2007). Siblings of Individuals With Autism Spectrum Disorders Across the Life Course. *Mental Retardation and Developmental Disabilities Research Reviews*, 13, 313-320.

Orsmond, G.I. and Seltzer, M.M. (2007). Siblings of individuals with autism or Down syndrome: Effects on adult lives. *Journal of Intellectual Disability Research*, 51, 682-696.

Orsmond, G.I., Lin, L.Y., and Seltzer, M.M. (2007). Mothers of adolescents and adults with autism: The contribution of disability in siblings to maternal well-being and family adjustment. *Intellectual and Developmental Disabilities*, 45, 257-270.

Quatromoni, P.A. (2008). Clinical Observations from Nutrition Services in College Athletics. *J Am Diet Assoc*, 108: 689-94.

Shattuck, P.T., Seltzer, M.M., Greenberg, J.S., **Orsmond, G.I.,** Lounds, J., Kring, S., and Bolt, D. (2007). Changes in Autism Symptoms and Maladaptive Behaviors in Adolescents and Adults with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 37, 1735-1747.



Singh, L., Nestor, S.S., and Bortfeld, H. (2008). Overcoming Effects of Variation on Infant Word Recognition: Influences on Word Familiarity. *Infancy*, 2008, Vol. 13 Issue 1, 57-74.

Smith, B.A., Kubo, M., Black, D., **Holt, K.G.,** Ulrich, D.B. (2007). Effect of Practice on a Novel Task, Walking on a Treadmill: Preadolescents With and Without Down Syndrome. *Physical Therapy*, 87, 1-12.

Starr, J. (2007). Pulmonary Physical Therapy. In Seigelman, R., O'Sullivan S.: *Guide for Physical Therapy License Examination*, International Educational Resources, Ltd., Concord, MA.

Taggart, M.J. and **Morgan, K.G.** (2007). Regulation of the Uterine Contractile Apparatus and Cytoskeleton. *Semin Cell Dev Biol.* 18(3): 296-304.

White, D.K., **Wagenaar, R.C.,** Del Olmo, M.E. and Ellis, T. (2007). The Test-Retest Reliability of 24 Hours of Activity Monitoring in Individuals with Parkinson's Disease in Home and Community. *Neurorehabilitation and Neurological Repair*, 21(4): 327-40

Zikopoulos, B., **Barbas, H.** (2007). Circuits Formultisensory Integration and Attentional Modulation Through the Prefrontal Cortex and the Thalamic Reticular Nucleus in Primates. *Rev Neurosci.* 18(6): 417-38.

Awards & Honors

Numerous faculty and students were honored for their professional contributions, commitment to service, and excellence in scholarship during the 2007-2008 academic year. A selection of those recognized:

FACULTY AWARDS

Director of Programs in Athletic Training **SARA BROWN**, MS, was awarded the Athletic Trainer of the Year (2008) from Athletic Trainers of Massachusetts.



Sharon Cermak

Professor **SHARON CERMAK**, EdD, received the Lady Davis Fellowship from the Hebrew University, Israel.

KEE CHAN, PhD, was invited to participate on an NIH Career Symposium panel in Washington, D.C., in April 2008. She was also awarded a Genetic Alliance Transformational Leadership Scholarship.

JEFFREY COADY, PhD, a Developing the Emerging Scientist awardee, was also selected as one of ten junior scholars by NIH and the American Speech-Language-Hearing Association (ASHA) to participate in the 2008 conference in Washington, D.C.



Wendy Coster

Associate Professor **WENDY COSTER**, PhD, delivered the 2008 Eleanor Clarke Slagle Lecture "Embracing Ambiguity: Facing the Challenges of Measurement" to the annual meeting of the American Occupational Therapy Association in Long Beach, CA; the Lectureship is the highest academic award granted by the AOTA. The AOTA also awarded her a recognition certificate for her role as catalyst mentor in the Leadership Development Project and a Certificate of Appreciation (2008) "in recognition and appreciation of her significant contributions to occupational therapy."

Clinical Associate Professor **DAVID CREASEY**, MD, received the 2008 Whitney R. Powers Award for Excellence in Teaching.



David Creasey

ART DELL ORTO, PhD, Associate Executive Director, was awarded the first Cohen-Danley Lifetime Achievement Award, which is designed to honor individuals who have made outstanding contributions to the field over the course of their careers while personifying its values and highest ideals.



Art Dell Orto

Clinical Associate Professor **TERRY ELLIS**, PhD, received the Gertrude M. Lamb Award from Springfield College for outstanding contributions to the physical therapy profession in April 2008.



Terry Ellis



Norm Hursh

Professor **COURTENAY HARDING**, PhD, was honored with a special award for "important contributions to the humane treatment of people with schizophrenia" by the International Society for the Psychological Treatments of the Schizophrenias and Other Psychoses (ISPS-US) at the national annual meeting.

Associate Professor **NORM HURSH**, ScD, was awarded the Rehabilitation Educator of the Year Award by the International Association of Rehabilitation Professionals at their Annual Conference in Los Angeles in May 2008.

Assistant Professor **PAULA QUATROMONI**, ScD, was named media Spokesperson on Childhood Obesity for the American Heart Association and served as Advocacy Captain for the American Heart Association campaign on obesity titled "You're the Cure." She was also invited to become a member of the Boston Obesity Nutrition Research Center.

Clinical Assistant Professor **ANNE SULLIVAN SOYDAN**, ScD, received the Mary Switzer research fellowship (2008-2009) from the National Institute on Disability and Rehabilitation Research (NIDRR).

Associate Professor **ELSIE VERGARA**, ScD, received a Fulbright Award through the Senior Specialists Scholar Program and will travel to Australia to study at the University of Sydney for seven weeks.

Professor **ROBERT WAGENAAR**, PhD, was named the Orthotic Education and Training Trust Lecturer by the International Society of Prosthetics and Orthotics UKNMA 2007. He was also a Dozor Visiting Scholar, serving as Faculty of Health Sciences at Ben-Gurion University of the Negev.



Paula Quatromoni

GRADUATE STUDENT AWARD

MSOT I student **ELEXA WAUGH-QUASEBARTH** was awarded an Albert Schweitzer Fellowship; the Fellowship program's mission is to reduce disparities in health and healthcare by developing "leaders in service" who are individuals who are dedicated and skilled in helping underserved communities and who influence and inspire others by example.



Robert Wagenaar

OUTSTANDING SENIOR AWARDS

MAGGIE CATLIN and **MICHAEL GUSS** received this year's PROFESSIONAL CONTRIBUTION AWARD, an honor given annually to students who show great potential professionally through scholarship, research, clinical experience, and promoting programs to the community.

JENNIFER ADAMS and **MEENA THEVA** received the TWINESS AWARD, presented by an honor society the Class of 1921 organized to recognize seniors who exemplify service, loyalty, thoughtfulness, and excellence of scholarship.

NICHOLAS DEPUTY and **JOSHUA MERSON** received the COMMUNITY SERVICE AWARD, annually presented to students who are actively involved in volunteering outside the University using skills they've attained through their education, and showing an outstanding ability to represent the ideals set forth by the College.

ELENA QUATTRONE and **RACHEL TORAN** were presented with the STUDENT ACTIVITY AWARD, which recognizes students who make strong contributions to College and/or University extracurricular activities.

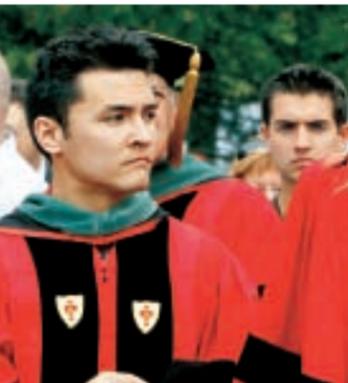
ROBIN BERSHADER was presented with the 2008 BERNARD KUTNER AWARD, given annually to the student who exemplifies the ideals of Sargent College through excellence of scholarship, high moral character, outstanding service to the School and community, loyalty and service to one's fellow students, and exemplary potential as a health care professional.

STAFF AWARDS

Fieldwork Clinical Assistant **JOAN GENTILE** received both the University Perkins Award for Meritorious Service and the Sargent College Award of Merit for her years of outstanding work supporting the occupational therapy and physical therapy clinical education programs.



Joan Gentile



Commencement 2008

Graduating Students

Prepare to Soar

On Sunday, May 18, 2008, 400 students gathered with family, friends, faculty, and staff to celebrate Commencement and receive baccalaureate, master's and doctoral degrees. "I'm proud to hand you your diplomas today and, like your parents, watch with pride as you prepare to soar in your careers, no longer as Sargent students but now as Sargent alumni."

I look forward to learning about the difference I know each of you will make in our world," said Gloria Waters, PhD, Dean of Boston University College of Health & Rehabilitation Sciences: Sargent College, as she welcomed attendees.

Invited speaker **Lisa Iezzoni, MD, MSc**, professor of medicine at Harvard Medical School and Beth Israel Deaconess Medical Center and the associate director of the Institute for Health Policy at the Massachusetts General Hospital, stressed commonalities amongst the graduates, especially their need to think of patients as whole people, not individual body parts. Building on her own experience with multiple sclerosis and living in a wheelchair, she reminded graduates that partnering with patients to improve daily living is an opportunity to "give countless patients the same gift of freedom and independence and make numerous lives better."

Along with invited speaker Dr. Iezzoni, Class of 2008 Valedictorian Donna Kurowski also gave a speech. Donna received her bachelor's degree in

human physiology with a 3.99 GPA; she is a student in Boston University's Modular Medical Integrated Curriculum (MMEDIC) program in which students earn both a BS and MD in 8 years.

Before presenting diplomas, Dean Waters recognized two outstanding individuals from Sargent for their extraordinary contributions to the College.

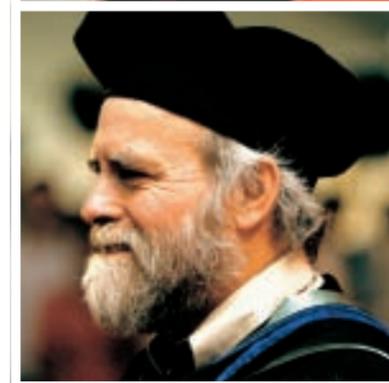
The **Sargent College Award of Merit**, awarded annually to faculty, staff, or an alumnus who has served the College in an exemplary manner, was presented to Ms. Joan Gentile, assistant for the Clinical Education components of the Occupational Therapy and Physical Therapy programs.

Dr. David Creasey, clinical associate professor in the Rehabilitation Counseling program, received the **Whitney R. Powers Award for Teaching Excellence**. His enthusiasm for teaching and ability to present material in a thoughtful, concise, and effective manner were highlighted by a student who wrote, "Dr. Creasey shows a clear mastery and passion for the subjects that he teaches and brings them to life for his students."

The award is named in honor of Whitney R. Powers, Professor Emeritus of Sargent College, who for over 25 years shared his outstanding teaching gifts with students.

"I'm proud to hand you your diplomas today and, like your parents, watch with pride as you prepare to soar in your careers, no longer as Sargent students but now as Sargent alumni. I look forward to learning about the difference I know each of you will make in our world."

Right, top to bottom: Dean Gloria Waters; Professor Art Dell Orto; Commencement Speaker Lisa Iezzoni; Dean Gloria Waters and Clinical Assistant Professor Lee Marinko, who also received her doctorate degree. Left: Sargent students and faculty.





SARGENT AT A Glance

STUDENTS	UNDERGRADUATE	GRADUATE
Number of full-time students (as of Spring 2008)	797	353
Average SAT	1258	n/a
Average GRE	n/a	1200
FACULTY		
Full-time	57	
Part-time	38	
ALUMNI		
13,500 in 53 countries		
CLINICAL SITES		
1,400 in all 50 states and 4 countries		

BOSTON UNIVERSITY COLLEGE OF HEALTH & REHABILITATION SCIENCES: SARGENT COLLEGE has been preparing health care leaders and defining health care leadership for 127 years. As knowledge about health and rehabilitation increases and society's health care needs become more complex, BU Sargent College continuously improves its degree programs to keep up with this ever-evolving field and our learning environment fosters the values, effective communication, and clinical skills that distinguish outstanding health professionals. Our curriculum also includes an important fieldwork component, providing students in every major with substantive clinical experience; clinical internships are available at more than 1,400 health care facilities across the country. The College also operates outpatient rehabilitation practices that offer a full range of services to the Greater Boston community.

PROGRAMS OF STUDY OFFERED AT BOSTON UNIVERSITY SARGENT COLLEGE OF HEALTH & REHABILITATION SCIENCES

- Applied Anatomy & Physiology
- Athletic Training
- Audiology
- Health Science
- Human Physiology (Pre-Med)
- Nutrition
- Occupational Therapy
- Physical Therapy
- Rehabilitation Sciences
- Speech-Language Pathology
- Speech, Language & Hearing Sciences

SPECIAL PROGRAMS

- Combined BS and MPH in Public Health
- Combined BS in Athletic Training and Doctor of Physical Therapy

U.S. NEWS & WORLD REPORT BEST GRADUATE SCHOOL RANKINGS

Most of our professional graduate programs are ranked within the top 15% in the country. Specific rankings are as follows:

- Occupational Therapy Program ranked #1 (tied) out of 152 programs
- Physical Therapy Program ranked #24 out of 199 programs
- Speech-Language Pathology Program ranked #25 out of 244 programs

NATIONAL CERTIFICATION BOARD EXAM PASSING RATES

Percentage of Sargent students in entry-level graduate programs who passed the exam the first time:

Nutrition	99%
Occupational Therapy	100%
Physical Therapy	100%
Speech-Language Pathology	100%