

## Sykes Gift Establishes First Endowed Chair for USC Biokinesiology and Physical Therapy



The Sykes Family:  
Tracy and Gene Sykes with their children (l. to r.),  
Reeve, Grant-Christopher, Rollin, and Peter.

A \$1 million gift from the Sykes Family has established the first endowed faculty chair in the USC Division of Biokinesiology and Physical Therapy. Professor Linda Fetters, director of the Division's Developmental Motor Performance Laboratory, will be the

inaugural holder of the Sykes Family Chair in Pediatric Physical Therapy, Health, and Development.

Tracy M. Sykes, DPT (USC '98) and her husband, Gene T. Sykes, a managing director at Goldman Sachs, have also pledged a \$250,000 matching gift. The Division will seek additional funding sources to bring the total endowment to \$1.5 million.

An endowed chair establishes a permanently funded faculty position to be held by a senior professor who has achieved distinction in the field. The establishment of the Sykes Family Chair ensures that pediatric physical therapy and child health and development will maintain its high standing within the Division for many years to come.

"We are extremely grateful for the Sykes' generosity and vision," said James Gordon, associate dean and Division chair. "This gift

will help us further establish our program as a national leader in pediatric physical therapy education, clinical practice, service, and research."

After graduating from the Doctor of Physical Therapy program, Tracy Sykes worked as an outpatient physical therapist in Santa Monica. She has been a member of the Division's Board of Councilors since 2004 and has supported many initiatives, including the Bice Clinical Research Center campaign. To help students master pediatric strength evaluation and development assessment, she brings her three youngest children to the classroom to serve as subjects.

Dr. Fetters was chosen to fill the chair based on her extensive pediatric physical therapy experience, including clinical practice, research, teaching, and administration. Her research is focused on improving the quality of life for infants and children with movement difficulties caused by neurological insults.

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## Professor Carolee Winstein Delivers McMillan Lecture at APTA

At the 40<sup>th</sup> annual meeting of the American Physical Therapy Association (APTA), Professor Carolee Winstein challenged attendees to ask themselves, "Today, in 2009, how can our profession reach its full potential?"

Dr. Winstein, director of research at the USC Division of Biokinesiology and Physical Therapy, delivered the McMillan Lecture, the highest honor bestowed by the APTA on an individual.

Entitled "The Best We Can Be Is Yet To Come," her talk addressed three goals she believes are needed for the physical

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## Laboratory Renamed To Honor Dr. Jacquelin Perry

Dr. Jacquelin Perry is considered the world authority on gait analysis, the systematic study of walking that is used to assess disorders. Her involvement in the USC Division of Biokinesiology and Physical Therapy—as a longtime faculty member, current member of the Board of Councilors, and donor—is legendary.

In recognition of her distinguished contributions to the field and longstanding commitment to physical therapy education at USC, the musculoskeletal biomechanics research laboratory known to students and faculty as MBRL has been renamed The Jacquelin Perry Musculoskeletal Biomechanics Research Laboratory.

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**Division Admissions:  
Exceptional New Students**

Dr. James Gordon

Given tough economic conditions and the high price of a USC education, one might expect that we would be having trouble filling our classes. But, if anything, the opposite is the case. In the past admissions cycle, for DPT students who entered in fall 2009, we had more than double the number of applicants (685 applicants as compared to 320 in 2008). Given our annual enrollment of about 90-95 students, this means that the admissions process is becoming highly selective.

The increase in number of applications to USC was accompanied by a clear increase in overall quality and diversity. Our enrolled students this fall represent geographical and ethnic diversity, and academic quality indicators (e.g., GPA and GRE scores) rose significantly. Although there is considerably more to admissions than choosing the applicants with the highest grades and test scores, this improvement is gratifying to see.

The most important reason for the jump in applications was the introduction last year of the Physical Therapy Computerized Application Service (PTCAS), which allows applicants to submit a single Web-based application to apply to multiple PT programs. In 2010, just over half of PT programs in the United States (106 out of 210) will participate in PTCAS, a service of the American Physical Therapy Association.

However, the introduction of PTCAS is probably not the only reason for the increase in the number of students applying to PT schools. Last year, although more than half the PT programs in the United States did not participate in PTCAS, my colleagues at some of those schools have told me that almost all showed significant increases in applications.

I believe that current economic and sociopolitical conditions are key factors. It is well known, for example, that graduates with bachelor's degrees often look to graduate programs when jobs are scarce. In addition, recessions often highlight the advantages of healthcare professions, which have less unemployment than other professions during tough economic times. Media stories about the need and potential for health care reform and universal coverage may have also helped.

But beyond mere economic factors, I wonder if we are seeing a historical shift among young people away from professions focused on making money and toward professions focused on helping others. We might think of this as the "Obama effect."

Is there a more appropriate profession than physical therapy to attract young people who desire long-term satisfaction in their lives? In 2007, the University of Chicago's National Opinion Research Center published the results of a long-term survey that placed physical therapy second among professions with the highest job satisfaction (the clergy was number one, and PT was tied for second with firefighters).

We are seeing a generation of exceptional students in our classrooms. They are academically excellent, intellectually curious, highly motivated to succeed, and driven by idealism. The future of our profession is in good hands.

James Gordon, Associate Dean and Chair

**In Motion**

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## Recent Board Appointments

### PAUL D. GASPAR, DPT

Dr. Paul D. Gaspar (USC DPT '98) is a board certified cardiovascular and pulmonary clinical specialist. He is founder and president of Gaspar Doctors of Physical Therapy, a privately owned and operated company consisting of four outpatient physical therapy clinics that have been serving the San Diego North County since 1994.

Dr. Gaspar is vice president of the California Private Practice Special Interest Group, a member of the PTPN Quality Assurance Board, and a trustee of the Physical Therapy Political Action Committee (PT-PAC) of the American Physical Therapy Association (APTA). He is also a member of the Private Practice Section of San Diego Physical Therapy.

Dr. Gaspar has headed several cardiopulmonary and orthopaedic research projects and has held teaching positions in the physical therapy and exercise physiology programs at USC, Chapman University, CSU Fullerton, and Loma Linda University.

### DENNIS GERTMENIAN, MBA

Founder and former CEO and chairman of Ready Pac Foods, Dennis Gertmenian (USC '68) has completed more than 35 mergers and acquisitions over his 40-year career. He is currently a member of the Ready Pac Foods board of directors and CEO of Foxdale Properties, LLC, a real estate property management and investment firm he founded in 1998.

Mr. Gertmenian served as founder and chairman of Ready Pac Food's Kids to Camp charity, which has enabled more than 3,700 inner-city youth nationwide to attend local summer camps. He received the City of Hope Research Fellowship Award for his support of the organization's fight against cancer.

An executive committee member of the California Community Foundation board of trustees, Mr. Gertmenian also sits on the boards of Semester at Sea®, sponsored by the University of Virginia, and the Gertmenian Foundation. He is a supporter of Methodist Hospital's Patient Tower Campaign, neighborhood schools, and numerous charitable organizations.

A USC alumnus, Mr. Gertmenian earned an MBA from Pepperdine University. He and his wife live in Pasadena.

### JOHN C. HISSERICH, DPH

A staff consultant for Assemblymember Paul Krekorian (43<sup>rd</sup> District) since 2007, Dr. John C. Hisserich was associate vice president for health affairs at USC from 1998 to 2005. While at USC, he held academic appointments as clinical associate professor of preventive medicine and clinical associate professor of pharmacy.

Dr. Hisserich's research is in the areas of cancer control and epidemiology, ethical and legal problems in the development of medical data banks, and analysis of demand for emergency medical services. He earned both his DPH ('70) and MPH ('66) degrees from UCLA.

Dr. Hisserich has served as a mediator for the Second District Settlement and Mediation Program in the California Court of Appeals since 2002 and as a volunteer mediator for the Dispute Resolution Program of the Los Angeles City Attorney's Office since 2000. He has been a member of the board of directors of the American Cancer Society and of several ACS committees and task forces. A former president of the Cancer Control Society, Los Angeles, he has also served on its board of directors.

### LINDA C. GIVVIN, BS, PT

Linda Givvin (USC '70) practiced physical therapy for 17 years in orthopedics, head trauma, stroke, and sports medicine, serving in staff and supervisory roles in both hospital and private practices.

Currently a member of the Board of Governors of the USC Alumni Association, a member of USC Associates at the Provost level, and a Galen Center founder, Ms. Givvin was formerly a member of the USC Alumnae Coordinating Council. She has held leadership positions in USC Town and Gown since 1999, most recently as president (2006-2008). Town and Gown is a longstanding alumni organization with a \$38 million scholarship endowment.

Ms. Givvin is also a member of the board of directors of the Santa Monica Bay Auxiliary of Childrens Hospital Los Angeles. Her husband, Tom R. Givvin (USC '65) holds an MBA from Pepperdine University. He has owned Marina del Rey Garden Center since 1979.

### COVEY LAZOURAS, PT, DPT, NCS, ATP

Dr. Lazouras (USC DPT '01) has worked at Rancho Los Amigos National Rehabilitation Center in Downey, CA since graduation, currently as a supervisor in the stroke and gerontology service. He is also an adjunct instructor of clinical physical therapy in the USC Division of Biokinesiology and Physical Therapy and a clinical site mentor for the USC/Rancho Los Amigos Clinical Residency Program in Neurological Physical Therapy.

Dr. Lazouras is active in the California Physical Therapy Association. He has served as vice chair for the Long Beach South Bay district and is currently a three-term representative.

"The three things I am most passionate about in my life are my family, USC, and the patients and staff at Rancho," he said. "The knowledge I have gained working with such diverse patients is priceless. I draw strength and motivation from their incredible stories. My favorite quote is from Ralph Waldo Emerson: 'Do not follow where the path may lead. Go, instead, where there is no path and leave a trail.'"

## Board of Councilors

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Kathleen Bice	Schaffer
Thomas Eggleton	Alan J. Olsen
Paul D. Gaspar	Jorge Orozco
Dennis Gertmenian	Jacquelin Perry
Linda C. Givvin	Winkie Sonnefield
John C. Hisserich	Tracy M. Sykes
Kaye Kilburn	John Wallace Jr.
Nancy Krueger	



**Professor Carolee Winstein** *continued*



Dr. Carolee Winstein



PT 2009 attendees applaud Dr. Winstein's McMillan Lecture.

therapy profession to reach its full potential: strong academic centers; effective academic-clinical partnerships; and interdisciplinary collaborations with engineers, doctors, behavioral scientists, and other health care professionals.

Dr. Winstein, who is also director of the Division's Motor Behavior and Neurorehabilitation Laboratory, urged her listeners "to meet new knowledge and advances in science and health care with a willingness to learn, engage in discussion, and collaborate." She said she envisioned a time when "educators, practitioners, and researchers are valued equally for what they do, as long as the highest standards of excellence are what guide their efforts."

Her own interests are currently focused on the emerging field of social cognitive neuroscience. This interdisciplinary field asks questions about topics traditionally of interest to social psychologists, using methods traditionally employed by cognitive neuroscientists. Dr. Winstein is interested in how the intersection of these sciences can be applied to design more effective neurorehabilitation treatments. [See Division

News, page 7, for Dr. Winstein's work at RERC, an interdisciplinary model at USC.] Ranging from small-scale, laboratory-based feasibility studies to large-scale, multi-site clinical trial projects, Dr. Winstein's research projects include the five-year, \$12.2 million Interdisciplinary Comprehensive Arm Rehabilitation Evaluation (ICARE) stroke initiative, a randomized control trial funded by the National Institute of Health.

A USC alumna (MS, physical therapy) with a PhD in kinesiology from UCLA, Dr. Winstein has been a faculty member in the Division for 19 years. She spoke at PT 2009, the APTA annual conference held in June in Baltimore, Md.



Dr. Winstein and R. Scott Ward, APTA president.

**Laboratory Renamed** *continued*

"Dr. Perry always had a passion for improving the function of patients with movement-related impairments," said Associate Professor Christopher Powers, co-director of the lab with Associate Professors Kornelia Kulig and George Salem. "Early in her career, she recognized the critical importance of objective tools to measure the effects of disease and interventions.

"When available systems for measuring human performance did not suffice, she either refined existing systems or developed new technologies. She helped bring these technologies into the computer age, making them both practical and effective."

Dr. Perry wrote the seminal textbook, *Gait Analysis: Normal and Pathological Function*

(SLACK, Inc., 1992), which is still used in the physical therapy curriculum. In 1999, the year of her retirement from the faculty, she established the Jacquelin Perry Endowment Fund for the Study of Human Gait. The fund provides academic scholarships to graduate students in MBRL and travel stipends enabling them to present their research at scientific meetings.

MBRL is dedicated to the biomechanical study of human movement and musculoskeletal disorders, using state-of-the-art technology pioneered by Dr. Perry. Equipment includes a 2,500-square-foot motion analysis laboratory.

Graduate student training at MBRL involves a combination of experimental inquiry,

team interaction, and mentorship. The interdisciplinary approach is informed by collaborations with the USC departments of Biomedical Engineering, Neurology, Orthopaedic Surgery, and Radiology.



(l. to r.) Dr. Kornelia Kulig, Dr. Christopher Powers, Dr. Jacquelin Perry, and Dr. George Salem.

## Cancer Patients Moving Toward Recovery

When 53-year-old Robert Kinaga was treated at USC Norris Cancer Hospital for a cancer mass in his neck, he discovered the benefits of physical therapy.

“I was able to have enough range of motion to do most things,” he said, “and maintained enough strength to remain mobile and functional. Light to moderate exercise also helped my energy level counter the effects of the radiation, even at its worst.”

Kinaga took advantage of the oncology outpatient physical therapy program developed in 2004 by Marisa Perdomo, assistant professor of clinical physical therapy in the USC Division of Biokinesiology and Physical Therapy. While the current program primarily treats head, neck, and breast cancer patients, it

is available to all cancer patients at USC Norris and at PT Associates at HSC, the Division’s faculty practice on the Health Sciences Campus.

Each physical therapy program is tailored to the patient’s specific impairment and functional and activity limitations. Common concerns after surgery, chemotherapy, and radiation are lymphedema (fluid retention and tissue swelling), pain, tightness, and low energy. Posture and balance may also be affected.

“We evaluate fitness and range of movement, as well as cardiovascular health, which can be severely impacted by cancer treatments,” Dr. Perdomo said. “Then, we work toward complete body rehabilitation, developing safe guidelines for regaining optimal fitness.”



Dr. Marisa Perdomo

## ‘Doc Talk’ by Dr. Perdomo

As part of its ongoing staff and volunteer education program, the American Cancer Society (ACS) sponsors “Doc Talk,” a free monthly teleconference facilitated by a medical doctor, clinical researcher, pharmacist, or physical therapist. Each 45-minute talk highlights a different cancer-related topic. A PowerPoint presentation is available online afterward.

“Lymphedema: Prevention, Treatment, and Coping,” was the subject of a Doc Talk by Dr. Marisa Perdomo in October that emphasized the importance of physical therapy during cancer recovery. Several volunteers later said the talk was especially meaningful because she mentioned her own experience with the disease. The statewide audience of about 80 included caregivers as well as volunteers.

For more information about Doc Talks, call 1-800-227-2345, or visit the ACS website, [www.cancer.org](http://www.cancer.org).

## Division Faculty Attend Head and Neck Cancer Support Group Fundraiser

The Bluewater Grill in Redondo Beach was the waterfront setting of a June fundraiser for the USC Head and Neck Support Group. The event featured entertainment by magician/comedian Dana Daniels and musician Charlie Lustman, whose performance, “Made Me Nuclear,” offered an upbeat view of his bout with a rare form of cancer. Division participants included Drs. Sally

and Larry Ho, and Dr. Rizkalla Zakhary and his son Peter. Among the USC guests were Dr. Marisa Perdomo and Dr. Kimiko Yamada, co-founders of the oncology outpatient physical therapy program at USC. [See article above.]

The Head and Neck Cancer Support program holds meetings at USC on the first Saturday of each month to provide encouragement and a sounding board for individuals who have faced or are facing head and neck cancer, and their caregivers. For more information, visit <http://hncsupport.org>.



(l. to r.) John Everett (Dr. Perdomo’s husband), Dr. Marisa Perdomo, Rith Heng (Dr. Yamada’s husband), Dr. Kimiko Yamada-Heng, Dr. Sally Ho, and Dr. Larry Ho.

## Fit Families Program Receives \$19,000 Grant



Fit Families program participants work on upper-body strengthening activities.

Fit Families, the free wellness program for underserved children and adults living near the Health Sciences campus, has received a \$19,000 grant from USC’s Good Neighbors Campaign. GNC solicits faculty and staff donations for the USC Neighborhood Outreach program to help build strong communities in East and South L.A.

Since it was launched in 2006 by the USC Division of Biokinesiology and Physical Therapy, Fit Families has served more than 300 individuals. Children ages 10 to 17 and their families who are at high risk for diabetes and conditions associated with inactivity receive evaluations, individualized exercise programs, and nutrition counseling, with the goal of long-term lifestyle change.

The grant has enabled Fit Families to purchase equipment; provide participants with pedometers, T-shirts, and exercise-and-food logs; and pay for the salaries of students from the Division, who help staff the program.

“They teach you how to take care of yourself and be more aware of what you’re eating, and why you should exercise,” said Graciela Serrano, who has participated in the clinic with her two children. “My kids are more interested and motivated to take care of themselves, and are more active.”

Fit Families delivers services through group lectures, discussions, and exercise activities; interactive demonstrations; one-on-one counseling; and computer-based diabetes and nutrition tutorials.

“The program has become really popular, with people finding out mainly by word of mouth,” said Cheryl Resnik, assistant professor of clinical physical therapy and the Division’s director of community outreach. “With schools cutting physical education programs, these kinds of programs are especially needed.”

Fit Families currently partners with El Sereno, Griffin Avenue, Murchison Street, and Sheridan Street elementary schools, Bravo Medical Magnet High School, and Hazard Park. The six-week program is offered at the park every Saturday, from 9 a.m. to noon. To volunteer, contact Oscar Gallardo, program director, at [oggallar@usc.edu](mailto:oggallar@usc.edu). To refer a child or family, call 323-224-5592.

## Local Community Needs Better Access to Healthful Food

When Cheryl Resnik realized that many of the youth in her Fit Families classes were malnourished or jittery from sugary foods, it was clear that just teaching about good nutrition wasn’t enough.

“They don’t have access to the kind of food they need,” said Dr. Resnik, assistant professor of clinical physical therapy at the USC Division of Biokinesiology and Physical Therapy and director of the Division’s community outreach programs.

The Ramona Gardens neighborhood of Boyle Heights where these youth live, adjacent to the USC Health Sciences campus, has been called a “food desert.” Residents without transportation must walk 45 minutes to the nearest grocery store.

In a press conference held last spring, Dr. Resnik joined local residents, LA Voice—an interfaith community organization that seeks to improve the quality of life in urban neighborhoods—and California State Assemblymember Kevin de León (D-Los Angeles) to call for improved access to nutritious food.

A spokesman for the California Grocers Association has said that his group, which represents 6,000 stores in California, is working with city officials to find viable solutions.



Dr. Cheryl Resnik speaks at a press conference outside Murchison Elementary School while Ramona Gardens resident Edelmira Ortega (extreme left) and LA Voice leaders hold a Google Earth map of grocery locations and photos comparing food available in neighborhood shops with more healthful food sold in more affluent communities.



## \$4.75 Million Grant Launches Pioneering Rehab Engineering Research Center

The National Institute on Disability and Rehabilitation Research has awarded a five-year, \$4.75 million grant to USC and Rancho Los Amigos National Rehabilitation Center to establish a new research center that will develop technologies to optimize the quality of life for older people with disabilities.

The Rehabilitation Engineering Research Center for Technologies for Successful Aging with Disability (RERC) will use the yearly \$950,000 grant award to study the challenges of growing older with a pre-existing or new disability, and the positive effects new technologies can have on independence, health, and quality of life.

Under the direction of Dr. Carolee Winstein, director of research at the Division of Biokinesiology and Physical Therapy, RERC will also bring together clinicians, researchers, policy experts, and innovators from other USC sectors. They will include the Division of Occupational Science and Occupational Therapy, Davis School of Gerontology, Keck School of Medicine, Rossier School of Education, Stevens Institute for Innovation, Viterbi School of Engineering, the Information Sciences Institute, and the Institute for Creative Technologies.

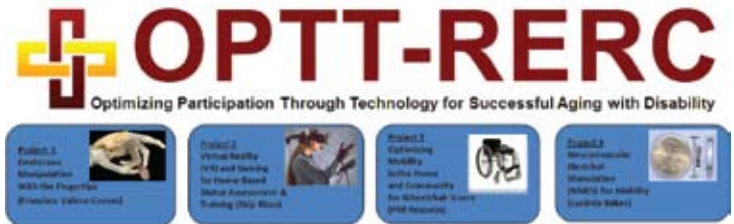
“The center is diverse and patient-centered, giving it the power to bring life-changing technologies to market and help many patients,” said Dr. Winstein. “USC is particularly good at multidisciplinary efforts. Everyone is learning from each other.”

The target beneficiaries of RERC technologies are adults with cerebral palsy, chronic spinal cord injury, traumatic brain injury, stroke, Parkinson’s disease, and osteoarthritis affecting the hands and fingers, and aging individuals who use a wheelchair.

RERC will focus on four projects. Rancho Los Amigos, a world-renowned rehabilitation hospital in Downey, Calif., will provide patient evaluation for Projects One and Two and house Projects Three and Four.

Project One, Dexterous Manipulation with the Fingertips—led by Francisco Valero-Cuevas, associate professor of biomedical engineering and biokinesiology—seeks to develop a reliable method for assessing hand function and dexterity, as well as a virtual reality system for home use that will enable patients to retain or improve hand and finger movement. [See “Pushing a Neuromuscular Control System to the Limit,” on page 15.]

Project Two, Virtual Reality and Gaming for Home-Based Motor Assessment & Training—led by Albert Rizzo, a research scientist with the Institute for Creative Technologies—seeks to develop low-cost, game-based virtual reality systems that people with a range of functional impairments can use at home to retain or increase physical function and movement.



Project Three, Optimizing Mobility in the Home and Community for Wheelchair Users will examine methods—including virtual reality—for teaching movement techniques that minimize and prevent the shoulder damage that is often a result of propelling and moving in and out of a wheelchair. This project will be led by Philip Requejo—RERC co-director, adjunct assistant professor of kinesiology and biomedical engineering at the Division, and director of the Rehabilitation Engineering Program at Rancho Los Amigos—and Sara Mulroy, adjunct assistant professor of biokinesiology and physical therapy.

Project Four, Neuromuscular Electrical Stimulation for Mobility will be led by Lucinda Baker, associate professor of biokinesiology and physical therapy. With the goal of preventing pressure ulcers, the project will explore the feasibility of implanting wireless micro-stimulators in muscles to automatically shift an immobile patient’s body weight and build up gluteal muscle volume and musculocutaneous circulation.

For more information about RERC, visit [www.isi.edu/research/lerc/](http://www.isi.edu/research/lerc/).

## Sykes Gift *continued*

She has studied the effect of in-utero drug exposure on sensorimotor development (from birth to age two) and the coordination of premature infants with a very low birth weight and central nervous system white-matter damage. Using an innovative computerized mobile paradigm, she has developed physical therapy treatments for infants at risk of developing cerebral palsy.

Dr. Fetters teaches courses in development, pediatric physical therapy, and evidence-based physical therapy practice. She said that establishment of the endowed chair “supports a vision that focuses on enhancing the health and well-being of children through education of leaders in pediatric physical therapy and rehabilitation, advancement of cutting-edge research, and outreach to the community neighbors of the University of Southern California.”



Dr. Linda Fetters



Dr. Robin Burks

## Robin Burks, PT, DPT, CHT

Dr. Robin Burks, instructor of clinical physical therapy in the USC Division of Biokinesiology and Physical Therapy and certified hand therapist at USC University Hospital Outpatient Physical Therapy Clinic, died September 3, 2009 after a long and courageous battle with brain cancer.

Dr. Burks joined the USC faculty in 2002 with primary responsibility for treating patients at USC University Hospital. He was instrumental in establishing a thriving practice in hand physical therapy and became nationally recognized as an expert in this field. A skilled clinician with a gentle yet authoritative approach, Dr. Burks also trained hundreds of students in the classroom as well as in the clinic.

In August 2008, just seven months after he had been diagnosed with a brain tumor, Dr. Burks was selected by the Division faculty to deliver the White Coat Ceremony Address to incoming DPT students. This honor is reserved for individuals who the faculty believe exemplify the highest ideals of humanistic health care.

Dr. Burks had returned to work after surgery, radiation, and chemotherapy, and was treating a full caseload. He concluded his lecture with the words: "I hope ... that you will say to yourself when you wake up each morning, 'I have to go to work today; I am glad.' Then put on your coat, roll up your sleeves, and make the world a better place."

In 2009, Dr. Burks' symptoms returned, and he was forced to leave his beloved work for the last time. He is survived by his wife, Debra Burks Hori, and his son Griffin. A memorial service was held October 15, 2009, in Mayer Auditorium on the Health Sciences Campus.

## Richard Erhard, PT, DC

The USC Division of Biokinesiology and Physical Therapy mourns the loss of Dr. Richard Erhard, who passed away October 3, 2009 after a long battle with melanoma.

Dr. Erhard was a world-renowned manual physical therapist who taught and lectured extensively throughout the United States and internationally. His work has been instrumental in developing clinical prediction rules and clinical practice guidelines for low-back pain. At USC, he was involved in the early development of the orthopaedic residency and mentored many graduates who have since become integral to the Division.

Dr. Erhard's contributions to the clinical practice of orthopaedic physical therapy were recognized by the Orthopaedic Section of APTA with the establishment of the Bowling-Erhard Clinical Practice Award in 2007.

Todd Davenport (USC '02, '03), assistant professor in the Department of Physical Therapy, University of the Pacific, introduced a motion to recognize Dr. Erhard's life and achievements at the Assembly of Representatives of the California Physical Therapy Association.

The motion reads, in part: "Richard E. Erhard demonstrated and taught empathy, self-reflection, and a creative though carefully reasoned approach to patient care using manual therapy. ... [He] was our role model for the collaborative approach to clinical research necessary to identify the safest, most effective, and most responsible practices."



Dr. Richard Erhard with Dr. Komelia Kulig (l) and Drs. Sally and Larry Ho at a recent Combined Sections Meeting.

## Vera Morrow

Mrs. Vera Morrow, former student affairs coordinator in the Division of Biokinesiology and Physical Therapy when it was located on the University Park campus, has passed away. Initially hired in the 1960s as a receptionist, she was a valued member of the Division for nearly three decades before her retirement. She leaves a son, two daughters, and several grandchildren.



## Bice Center Construction To Start in January

Despite the USC Administration's moratorium on new capital construction projects, the Division of Biokinesiology and Physical Therapy has sought and received special approval to proceed with construction of the Bice Clinical Research Center, scheduled for January 2010. However, additional support is still needed.

Named for Kathleen Bice (USC '69), who pledged the center's lead gift of \$150,000, the new facility is designed to accommodate research subjects and patients participating in clinical trials to advance evidence-based rehabilitation practice.

The Bice Center will be located in a renovated 2,000-square-foot teaching laboratory on the

first floor of the Center for Health Professions. Amenities will include a large multi-function space for testing movement, five testing rooms, two interview rooms, two research offices, a changing room, a conference room, and a comfortably appointed waiting room. Renovation costs are estimated at approximately \$400,000.

We are deeply grateful to everyone who has made a contribution to the Bice Center thus far. As of early November 2009, the Division has received pledges totaling \$373,045.

Gifts may be made outright in cash, or via a pledge over five years or less. While gifts of cash will meet the Bice Center's immediate needs, you may wish to donate appreciated assets such as stock, personal property, or real

estate. Donations are tax-deductible to the fullest extent of the law.

Commitments of \$5,000 or more will be recognized on the Bice Center's Wall of Honor, prominently located near the entrance. Gifts of \$100 or more will be recognized on the Bice Center website Virtual Wall of Honor. All gifts will be listed in the *In Motion* Honor Roll of Donors on a yearly basis. [See page 11.]

Please use the enclosed envelope to make a pledge or send your donation. For more information about planned giving or naming opportunities, contact Calen Ouellette, director of development, at 213-740-7710. Thank you for your support.

## New Community-Based USC Research Center Planned

On October 3, 2009, an extraordinarily successful fundraiser netted \$70,000 to benefit the USC Community Health and Wellness Research Center at the Competitive Athletic Training Zone—a joint project of the USC Division of Biokinesiology and Physical Therapy and the Pasadena-based Competitive Athletic Training Zone (CATZ).

More than 200 guests attended "Setting the Pace: An Evening in Support of a New Standard of Health and Wellness," hosted by Patron-level sponsors Katie and Willy Marsh. Ms. Marsh and Kristi Horgan Link co-chaired the event, which was organized by Susan Sigward, assistant professor of research physical therapy, and coordinated by Jim Liston, a co-founder of CATZ. Major event supporters included Scott and Cathy Alexander, and Division Board member Dennis Gertmenian and his wife Susi.

The research, outreach, and education center will have a dual mission of injury prevention and advocacy of healthful, active lifestyles for people of all ages. The Center will include state-of-the-art biomechanics and exercise physiology laboratories and will be housed in the 14,000-square-foot CATZ facility, located two blocks from Huntington Memorial Hospital in Pasadena. This setting will provide unique opportunities for fostering increased community participation in and support of research projects.

A nationally recognized leader in fitness and performance training for people of all ages and levels of fitness, CATZ opened its Pasadena center in 1996. Since 2000, the Division has moved strategically to build on its national reputation for high-quality education and research through collaborations with CATZ and the local community. The partnership to build the USC Community Health and Wellness Research Center brings together two institutions with longstanding

traditions of leadership in their fields. The Center will provide valuable resources—personnel and expertise as well as vastly increased laboratory, office, and storage space. Together with greater exposure, these resources will lay the groundwork for large-scale intervention and longitudinal studies to fulfill the Center's mission.

Renovation costs for the Center are estimated at approximately \$1 million. As of early November, approximately \$130,000 has been raised, with an additional \$20,000 pledge due in February.

Additional donations—tax-deductible to the fullest extent of the law—are urgently needed to make the USC Community Health and Wellness Research Center a reality. Please use the enclosed envelope for cash gifts. Pledges (over five years or less) and donations of appreciated assets are also welcome. For more information about naming opportunities, planned giving, and estate gifts, please contact Calen Ouellette, director of development, at 213-740-7710.



Among the guests at "Setting the Pace" were (second from left, each row): Willy Marsh and Katie Hayden Marsh, who hosted the event in their home; Kristin Horgan Link (third from left), event co-chair with Ms. Marsh; Dr. Susan Sigward (fourth from left), event organizer; Jim Liston (center of back row); and Kevin Wentz (far right), co-founders of CATZ.



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## Honor Roll of Donors

We gratefully acknowledge the following alumni and friends for their financial contributions and the encouragement their support represents. This Honor Roll of Donors includes gifts recorded from July 1, 2008 to June 30, 2009, including donations to the Bice Clinical Research Center fund, the USC Health and Wellness Research Center fund, the Annual Fund, the PT Alumni Association fund, The Phillips Fisher Center fund, and the PT Scholarship fund. Every effort has been made to ensure accuracy. Please notify Sara Villagran at 323-442-1193 or [villagra@usc.edu](mailto:villagra@usc.edu) of any errors and/or omissions and accept our apologies for any discrepancies. To make a contribution, please use the enclosed envelope or visit <http://pt.usc.edu/> and select Alumni and Friends.

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# Spring 2010

## CONTINUING EDUCATION COURSE OFFERINGS

### Management of the Spine: Emphasis on the Cervical Region

**JANUARY 30-31, 2010**

**INSTRUCTOR:** Rob Landel, PT, DPT, OCS, CSCS, MTC  
**CONTACT HOURS:** 12

### Strategies for Improving Function in Patients with Neurologic Disorders

**INSTRUCTOR:** Beth Fisher, PhD, PT  
**CONTACT HOURS PER INDIVIDUAL COURSE:** 14

*Courses can be taken individually or as a series; held at St. Jude's Centers for Rehabilitation and Wellness in Brea.*

**PART I:** Upper Extremity Function  
**JANUARY 30-31, 2010**

**PART II:** Lower Extremity & Gait  
**MARCH 6-7, 2010**

**PART III:** Trunk and Postural Control  
**MAY 1-2, 2010**

### High Velocity, Low Amplitude Techniques for Spinal Manipulation

**INSTRUCTORS:** Peter Gibbons, MB, BS, DO, DM-SMed, MHSc.  
Philip Tehan, DO, Dip. Physiotherapy, MHSc.

**MODULE I:** **MARCH 12-13, 2010**

**MODULE II:** **MARCH 14-15, 2010**

**CONTACT HOURS PER MODULE:** 14

### Update on Lumbar Spine 2010

**APRIL 10-11, 2010**

**INSTRUCTORS:** Dedyre Teyhen, PhD, PT  
Kornelia Kulig, PhD, PT, FMAAOMPT  
Mike O'Donnell, PT, DPT, OCS, FAAOMPT

**CONTACT HOURS:** 14

### Patellofemoral Pain: A Critical Review of Evaluation and Treatment Techniques for Physical Therapists

**FEBRUARY 6, 2010**

**INSTRUCTOR:** Chris Powers, PhD, PT  
**CONTACT HOURS:** 7

### Management of the Shoulder: An Evidence-Based Approach

**APRIL 24-25, 2010**

**INSTRUCTOR:** John Meyer, PT, DPT, OCS  
**CONTACT HOURS:** 14

### Exercise Prescription: It Is Not Always 3 Sets of 10

**MAY 15, 2010**

**INSTRUCTORS:** E. Todd Schroeder, PhD  
Morgan Fones, PT, DPT, OCS  
**CONTACT HOURS:** 7

## Division Expands Continuing Education Programs

Beginning in 2010, the Physical Therapy Board of California will require physical therapists and physical therapy assistants to take a minimum of 30 hours of continuing competency coursework for licensure renewal.

The USC Division of Biokinesiology and Physical Therapy has been preparing for this transition by upgrading our distance-learning infrastructure, expanding on-campus course offerings, and offering custom courses for individual clinics. We have also implemented an online registration system and strategic marketing of our continuing education programs.

### DISTANCE LEARNING

The Division's investment in technology infrastructure has broadened the reach of our programs. Our videoconferencing system enabled residents in the Brooks Neurological Residency program in Jacksonville, Fla. to participate in Dr. Katherine Sullivan's Differential Diagnosis course. Next-generation distance-learning products from Elluminate® have made it possible for clinical instructors to participate in Dr. Linda Fetters' DPT III pediatrics course without disrupting their patient schedules.

### CUSTOM COURSES

The Division now has the capabilities to design courses for the unique needs of individual clinics on topics such as oncology, orthopaedics, neurology, pediatrics, and exercise physiology. Dr. Julie Tilson has taught versions of her research techniques course, Using Evidence To Empower Your Practice, at private clinics across the country. Participants receive the added benefit of one-year access to USC's online library resources.

### CAMPUS-WIDE PROGRAMS

Provost Max Nikias has led the drive to develop continuing education programs throughout the USC community. Continuing education and professional studies for all academic units are now centralized within the USC Office of Continuing Education and Summer Programs.

For a complete list of the Division's continuing education courses, please visit <http://pt.usc.edu/continuingeducation>.



Carolyn Strand, neurologic physical therapy resident, working with a patient in a continuing education course.

## Joe Godges Joins Faculty

Joe Godges has been appointed adjunct associate professor in the USC Division of Biokinesiology and Physical Therapy. In this part-time position, he will coordinate USC's efforts to provide instruction for the expanding number of clinical residency and fellowship programs across the nation, as well as for physical therapists seeking cutting-edge post-graduate clinical education.

Instruction will be provided in a classroom and laboratory facility near LAX that is designed to accommodate weekend classes for therapists within driving distance and modular (Monday through Friday) formats for therapists traveling to Los Angeles for concentrated training.

Dr. Godges serves as ICF-based clinical practice guidelines coordinator for the Orthopaedic Section of APTA. (ICF stands for International Classification of Functioning, Disability, and Health.) He is also coordinator of clinical education and practice for Optimus Corp, a provider of software and practice management support for outpatient orthopaedic and sports physical therapy private practices.

A member of the board of directors of the *Journal of Orthopaedic & Sports Physical Therapy*, Dr. Godges has served on the Orthopaedic Specialty Council of the American Board of Physical Therapy Specialties, APTA's Committee on Clinical Residency & Fellowship Credentialing, and the board of directors of APTA's Orthopaedic Section. He was formerly coordinator of physical therapy clinical residency and fellowship programs for Kaiser Permanente in Southern California.



Dr. Joe Godges

## Division To Host Evidence-Based Practice Institute

On May 21-22, 2010, the Division will host an Evidence-Based Practice Institute for physical therapy educators from around the nation, led by Drs. Linda Fetters and Julie Tilson. The institute is intended to facilitate development and enrichment of the Evidence-Based Practice (EBP) curriculum at participants' home institutions.

The program will include effective student-centered strategies for teaching search skills, critical appraisal, and evidence application. Each participant will be able to develop a curriculum component—multi-course, single course, or teaching methods. There will be ample opportunity to network and exchange ideas for developing students' EBP skills, knowledge, and habits.

The institute will be limited to 30 participants to foster a collegial, collaborative environment for sharing and learning. For more information, and to register online, visit <https://www.regonline.com/uscebpinstitute2010>.



The Langham Huntington in Pasadena, site of the Evidence Based Practice Institute.

## USC Hosts First International PFPS Retreat

Patellofemoral pain syndrome (PFPS) is one of the most common knee injuries seen by medical professionals. Individuals who experience PFPS appear to have a significantly greater chance of developing patellofemoral osteoarthritis later in life. The causes of PFPS are still not well understood.

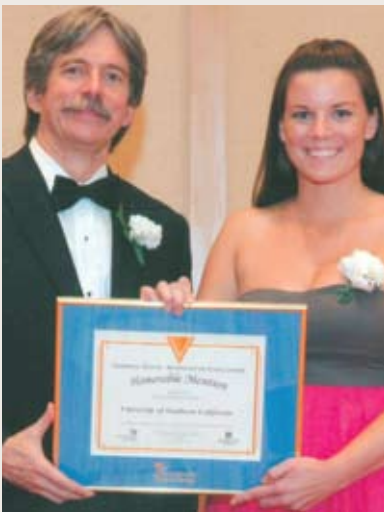
In spring 2009, USC hosted the first International Patellofemoral Pain Syndrome retreat in Baltimore, Md. to identify a core group of scientists who will meet every two years to review the current state of research and treatment. A primary goal of the retreat is to facilitate collaborations among researchers, both nationally and internationally.

Principal organizers of the event were Christopher Powers, associate professor in the Division of Biokinesiology and Physical Therapy, and Irene Davis, professor of physical therapy at the University of Delaware. The keynote speakers were: Kay Crossley, PhD, University of Melbourne (Australia); John Fulkerson, MD, Orthopedic Associates of Hartford; and Erik Witvrouw, PhD, University of Ghent (Belgium).



► AWARD WINNERS

**ERIC LEDERHAUS AND LAUREN LEPORINI** each received a 2009 USC Student Recognition Award at a May 14 ceremony in Bovard Auditorium. The award recognizes and honors students' outstanding leadership, volunteerism, and commitment to campus and community.



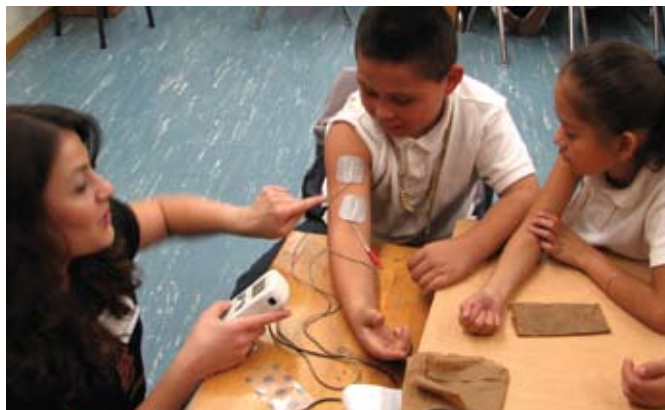
Kate Troskosky, leader of the USC student fundraiser for the Georgia State-Marquette Challenge, receives a certificate of recognition from Bill Boissinault, president of the board of trustees of the Foundation for Physical Therapy. USC won honorable mention in the Challenge, raising \$7,955 of the \$1.4 million total to benefit physical therapy research. The Challenge funds research grants and doctoral scholarships awarded by the Virginia-based foundation.

**Teaching The Body Electric**

Physical therapy students visited fourth-grade classrooms at Murchison Street Elementary School on Oct. 23, 2009 as part of the Mission Science program, funded by USC Neighborhood Outreach (UNO). Under the direction of Sharon K. DeMuth, adjunct assistant professor of clinical physical therapy, and Lucinda L. Baker, associate professor, the students used electrical stimulation to show the fourth-graders how electrical impulses in the body enable muscles to function. To teach The Body Electric module, PT students work with engineering students from USC Viterbi and Francisco Bravo High School students in the USC STAR research program.



USC PT student Kari Oki (r.) shows fourth-grade students how the electrical stimulation patch will work on Dr. DeMuth's arm. Ms. Oki serves as first-year student coordinator for the Mission Science program.



USC PT student Astghik Harutyunyan shows a fourth-grade boy how the electrical stimulation unit will cause his elbow to bend. The girl next to him presses her fingers on the muscle that controls this movement.

**Division Students, Faculty Represent USC at Glendale Health Fair**

Participation in community activities like this health fair, hosted by Assemblyman Paul Krikorian, helps Division students satisfy the curriculum's service-learning requirement.





## Terence Sanger Receives Joint USC Appointment

Terence Sanger, MD, PhD, formerly director of the Pediatric Movement Disorders Center at Stanford University, has joined the Department of Biomedical Engineering (BME) at the USC Viterbi School of Engineering. He will hold joint appointments in BME, the Division of Biokinesiology and Physical Therapy, and the Division of Neurology.

Dr. Sanger's new title is Provost Associate Professor, a distinction reserved for a select group of interdisciplinary scholars at USC. His research focuses on understanding the causes of pediatric movement disorders—in which incorrect signals are sent from the child's brain to the muscles—from both a biological and a computational perspective. A graduate of Harvard Medical School and MIT (PhD, electrical engineering), he has broad background that encompasses signal processing, control theory, neural networks, and computational neuroscience.

“Terry is a one-of-a-kind pediatric neurologist,” said BME Department Chair Michael Khoo. “He will treat patients at Childrens Hospital Los Angeles and also establish at USC a unique research program that uses computational models to account for and predict abnormal neuromuscular control in children with movement disorders, such as cerebral palsy.”



Dr. Terence Sanger

## Pushing a Neuromuscular Control System to the Limit



Dr. Francisco Valero-Cuevas

When Francisco Valero-Cuevas and his research team at USC asked eight adults to perform a simple experiment with the tip of their dominant index finger, the results challenged long-held theories about skeletal muscles. A full understanding of the findings will help explain why manual dexterity is so vulnerable to aging and disease, and may influence the design of more versatile robotic graspers.

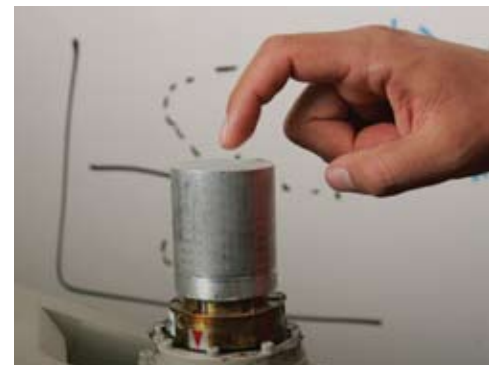
The experiment, published in *The Journal of Neuroscience*<sup>1</sup>, involved a rigid horizontal Teflon® surface attached to a force-torque sensor. Each volunteer's forefinger was covered with a Teflon® strip. The volunteers were first asked to press down hard without moving the finger. Then they were asked to keep pressing down firmly and move the finger against the surface to the beat of a metronome.

Motion diminished the finger pressure. But although the metronome speeds varied from “slow” to 36 times faster, there was no significant difference in maximal downward force despite the significant variance in speed.

To explain the results of the experiment, the team hypothesized that the universe of possible commands sent by the brain to the muscles was severely limited by the mechanical nature of the task.

This demonstration that the neuromuscular system can be pushed to its performance limit—even in a seemingly simple task involving control of force and motion—correlates with other recent work by Dr. Valero-Cuevas.

Associate Professor Valero-Cuevas holds a dual USC appointment in the Division of Biokinesiology and Physical Therapy and the Biomedical Engineering department of the Viterbi School of Engineering. His collaborators (and former students) were Kevin G. Keenan, University of Wisconsin-Milwaukee/Cornell University; Veronica J. Santos, Arizona State University/Cornell University; and Madhusudhan Venkadesan, Harvard University/Cornell University.



An experiment involving finger-tip pressure challenged long-held theories about skeletal muscles.

<sup>1</sup> “Maximal Voluntary Fingertip Force Production Is Not Limited by Movement Speed in Combined Motion and Force Tasks,” July 8, 2009, 29(27):8784-8789.

In Brief

**SHARON DEMUTH, PT, MS, DPT, PT, MS, DPT**, adjunct assistant professor of clinical physical therapy, co-authored “Utilizing Stationary Cycling: A Randomized Controlled Trial,” which has been accepted for publication in *Physical Therapy*. The paper is based on the PEDALS (Pediatric Endurance and Limb Strengthening) study for the Physical Therapy Clinical Research Network, which evaluated the effectiveness of stationary cycling for improving strength and fitness in children with the spastic dipelgic form of cerebral palsy. Co-authors are Eileen G. Fowler, Loretta M. Knutson, Kara L. Siebert, Victoria D. Simms, Mía H. Sugi, **Richard B. Souza**, Roksana Karim, and **Stanley P. Azen**.

**HSIANG-HAN HUANG, MS, OTR**, doctoral student (Boston University) working at USC and **Linda Fетters**, PhD, PT, professor of biokinesiology and physical therapy at USC are co-authors (with J. Hale and A. McBride) of “Bound for Success: A Systematic Review of Constraint-Induced Movement Therapy in Children With Cerebral Palsy Supports Improved Arm and Hand Use” (*Physical Therapy*, 89[11]:1126-1141, November 2009).

**KORNELIA KULIG, PhD, PT**, associate professor of clinical physical therapy at USC, was elected an honorary member of the American Academy of Orthopedic Manual Physical Therapists (AAOMPT). She is one of the academy’s eight founding members, all of whom were recognized by the honorary membership.

Dr. Kulig received a California Physical Therapy Association (CPTA) Research Publication Award for Faculty for “Nonsurgical Management of Posterior Tibial Tendon Dysfunction with Orthoses and Resistive Exercise: A Randomized Controlled Trial” (*Physical Therapy*, 89[1]:26-37, January 2009). Co-authors are **S.F. Reischl, A.B. Pomrantz, J.M. Burnfield, S. Mais Requejo**, D.B. Thordarson, and R.W. Smith. The award was presented October 3, 2009 at the CPTA Annual Conference in Pasadena. Dr. Kulig recently published “An Intensive, Progressive Exercise Program Reduces

Disability and Improves Functional Performance in Patients After Single-Level Lumbar Microdiscectomy” (*Physical Therapy*, 89:1145-1157, November 2009). Her co-authors in the Physical Therapy Clinical Research Network are **G.J. Beneck**, D.M. Selkowitz, **J.M. Popovich Jr.**, T.T. Ge, **S.P. Flanagan, E.M. Poppert, K. Yamada, C.M. Powers, S. Azen, C.J. Winstein, J. Gordon**, S. Samudrala, T.C. Chen, N. Shamie, L. Khoo, M.J. Spoonamore, and J.C. Wang.

**ROB LANDEL, DPT, OCS**, received the APTA James A. Gould Excellence in Teaching Orthopaedic Physical Therapy Award, in recognition and support of excellence in teaching OPT principles and techniques. The Orthopaedic Section Awards Ceremony was held February 11, 2009 in Las Vegas at the APTA Combined Sections Meeting.

**CHRISTOPHER POWERS, PhD, PT**, associate professor of biokinesiology and physical therapy at USC, received the 2008 Alumnus of the Year award from the Physical Therapy program at Columbia University for his numerous contributions to the profession of physical therapy and his mentorship of students and clinicians. As the award recipient, Dr. Powers delivered the commencement address to PT program graduates of Columbia University on May 20, 2009.

Dr. Powers was quoted in *The New York Times* (“Hips Are Bringing More Athletes to Their Knees,” May 31, 2009) about an apparent increase in hip injuries among professional athletes. “It’s not like workouts have changed all of a sudden,” he said. “People and doctors are just more aware of it diagnostically.”

A *Los Angeles Times* story (“Arthroscopy Surgery Not the Only Answer for Knees,” September 12, 2008) quoted Dr. Powers about examining movement patterns to look for dynamic misalignment and working with patients to change their gait.

He was also quoted by Eurekalert, the news service of the American Association for the Advancement of Science, about an APTA

study (*New England Journal of Medicine*, September 11, 2008) questioning the value of arthroscopic surgery.

**GEORGE SALEM, PhD**, associate professor of biokinesiology and physical therapy at USC and director of the Exercise and Aging Biomechanics research program, co-authored “Guidelines for Exercise for Older Adults,” a Position Stand for the official journal of the American College of Sports Medicine (*Medicine & Science in Sports & Exercise*®, 41[7]: 1510-1530). Co-authors are Wojtec J. Chodzko-Zajko, David N. Proctor, Maria A. Fiatarone Singh, Christopher T. Minson, Claudio R. Nigg, and James S. Skinner.

Dr. Salem was quoted in the Canadian newspaper *The Globe and Mail* (“Free Weights or Machines?” October 3, 2008). He said that “cheating” by using other muscle groups is common among free weights users, “but it can also be beneficial if you learn to use your whole body to provide stability and added strength.”

**CASSANDRA SANDERS-HOLLY, DPT, PCS**, adjunct instructor of clinical physical therapy at USC, and **Linda Fетters**, PhD, PT, director of the Development of Infant Motor Performance Laboratory (DIMPL) at USC, wrote the Clinical Bottom Line feature for *Pediatric Physical Therapy* addressing the research paper, “Effects of Intensive Physiotherapy in Infants Newly Diagnosed with Cerebral Palsy” (21[2]:149, Summer 2009). The authors discuss aspects of the paper that are relevant to clinicians and applications to clinical practice.

**NICOLAS SCHWEIGHOFER, PhD**, assistant professor of biokinesiology and physical therapy at USC, published the Division’s first robot paper in the *IEEE Transactions on Robotics* special issue (25: 556-558, June 2009). “An Adaptive Automated Robotic Task-Practice System for Rehabilitation of Arm Functions After Stroke” was co-authored by Dr. Schweighofer’s Computational Neuro-Rehabilitation & Learning Lab colleagues **Younggeun Choi**, **James Gordon**, and **Duckho Kim**. In an e-mail,

## ► STAFF CORNER

Dr. Schweighofer said that his team “now need convincing research data to follow up on our promises and make an impact in the field.”

**KATHERINE SULLIVAN, PT, PhD, FAHA**, associate professor of clinical physical therapy at USC, and **Shailesh Kantak**, PT, MS, PhD candidate in biokinesiology, received the 2009 Chattanooga Research Award for “Motor Learning in Children: Feedback Effects on Skill Acquisition” (*Physical Therapy*, 88:720-732, 2008), co-authored with Patricia A. Burtner, University of New Mexico. Dr. Sullivan and Mr. Kantak received a cash award and plaque June 11, 2009 at the APTA Honors and Awards Celebration in Baltimore, Md. The award is funded by the Chattanooga Group, Inc., a manufacturer of rehabilitative equipment.

Dr. Sullivan, a member of the Rehabilitation, Prevention and Recovery Committee of the American Stroke Association, was quoted in a May 2009 Associated Press story, “Stroke Tips for Caregivers,” timed to coincide with Stroke Month. “Each stage after the stroke requires adjustment as both the survivor and the caregiver negotiate the road to recovery,” she said.



(l. to r.) R. Scott Ward, APTA president, Dr. Sullivan, Shailesh Kantak, and a representative from the Chattanooga Group.

**JULIE TILSON, PT, DPT, NCS**, assistant professor of research physical therapy at USC, was honored with a CPTA Publication Award for Faculty for “Application of Evidence-Based Practice Strategies: Current Trends in Walking Recovery Interventions Post-Stroke” (*Topics in Stroke Rehabilitation*, May-June 2008). Co-authors are **Katherine Sullivan** and Sara Settle. Dr. Tilson received the award October 3, 2009 at the CPTA Annual Conference in Pasadena.

Dr. Tilson authored “Q&A About Shoulder Subluxation” (*Stroke Connection*, November/December 2009). The consumer magazine is published by the American Stroke Association. She was also quoted in “Surfing the Evidence” by Alice M. Stark (*PT Magazine*, June 2009), an article about APTA website research portals. “We know that PTs value evidence-based practice and think it’s important,” Dr. Tilson said. “The biggest barrier... is the amount of time it takes to get to the research, then to read and appraise it, and to integrate it into practice.”

**CAROLEE WINSTEIN, PHD, PT, FAPTA**, professor of biokinesiology and physical therapy at USC, delivered the McMillan Lecture at the 2009 APTA conference. [See page 1.] The lecture, titled “The Best We Can Be Is Yet To Come,” was published in the November issue of *Physical Therapy Journal* (89:1236-1249, 2009).

Dr. Winstein was quoted in “Forging a Groundbreaking Clinical-Academic Research Partnership” (*PT in Motion*, October 2009). The article describes the multi-site Physical Therapy Clinical Research Network, created via a \$1.5 million award to Dr. Winstein from the Foundation for Physical Therapy to enable clinicians and educators to be research partners. She explains that PTClinResNet’s effectiveness is due to bringing “practicing clinicians into the network as the key people who would be carrying out the trials in the clinical environment. So by virtue of their participating in the network, they learned a lot and they also learned to value this sort of partnership.”

**RIZKALLA ZAKHARY, PhD**, adjunct associate professor of biokinesiology and physical therapy, was honored with the CPTA 2009 Outstanding Part-Time Faculty Award for the USC Division of Craniofacial Sciences and Therapeutics. The award was presented May 27, 2009 at the Faculty Awards Dinner.

**Bold names indicate current and former faculty, students, and alumni of the Division.**

## Jennifer Bandich Recognized as Staff Member of the Month

In recognition of her “tremendous organizational skills, mastery of complex budget issues, and affable personality,” Jennifer Bandich was honored with the USC October 2009 Staff Member of the Month award. As director of research administration for the Division of Biokinesiology and Physical Therapy, she has been instrumental in the procurement of several large interdisciplinary center grants.

The award is presented to extraordinary individuals for their job performance and constant and dedicated service that makes a genuine contribution to the quality of life at USC. Division Professor Carolee Winstein, who nominated Bandich and presented the award, wrote that “Jennifer is truly a team player who has shown the capability to work well with everyone she interacts with across both campuses.” Congratulations, Jennifer!



(l. to r.) Dr. Carolee Winstein, Jennifer Bandich, and Lou Nieto, president of the USC Staff Assembly.



## Sandra Lee Jones Bequest Aids Bice Center

Sandra Lee Jones, PT '64, who passed away November 2, 2007 at age 67, bequeathed half her estate to the USC Division of Biokinesiology and Physical Therapy. The \$63,600 gift has been added to the Bice Center fund. A plaque commemorating Ms. Jones' generosity will be placed on the Bice Center's Wall of Honor.

Ms. Jones, who lived in Northridge before moving to North Hollywood, was a registered physical therapist at MCK Physical Therapy Matrix in Burbank. She made her first gift to the Division in 1977, and is best known for establishing and supporting a longstanding Book Award program that presented students with \$25 to \$200 (based on need) to buy textbooks. We are asking alumni who knew Ms. Jones to send their memories for publication in a future issue of *In Motion*.

## From the USC PTAA President



Dr. Thaomy Ngo

Dear Alumni and Friends,

As 2009 comes to a close, there is great hope and anticipation for a fresh start in the new year. That is why now, more than ever, it is important that we come together. As Albert Einstein once said, "Learn from yesterday; live for today; hope for tomorrow."

I could not be happier with our strong, hands-on USC Physical Therapy Alumni Association Board. We have been continually improving our bylaws and are looking forward to expanding Board membership.

We are also creating new committees that embody the objectives of our mission statement. Tentative committees include Social and Networking, Professional Development, and Outreach and Recruitment. Please contact me, Sara Villagran, or any Board member if you are interested in becoming involved in these upcoming opportunities.

Our "hope for tomorrow"—biokinesiology and physical therapy students—are essential to the future of the PTAA. The Board plans to develop a scholarship fund to ease the financial burden of our students.

We have just held our first delectable Grape Crush/Wine Social event (see page 20), and are now working with the School of Dentistry to plan a multi-class reunion. As we develop exciting social events for 2010, we hope to involve more alumni, but we cannot do this without your help. Our Facebook page is launched, and we will be adding bulletins and videos to bring together alumni all over the world. For more details, visit [www.facebook.com](http://www.facebook.com) and enter "USC Physical Therapy Alumni Association."

I am truly honored to have this opportunity to help lead the PTAA, and I thank you for being a member and for your continued support. To join the PTAA, visit <http://pt.usc.edu.ptaa>. Let us be active and learn, live, and hope together.

Fight on!

Thaomy Ngo  
President, USC PTAA



## Division Celebrates Homecoming

On November 14, more than 300 USC Biokinesiology and Physical Therapy alumni, faculty, students, and their families and friends gathered on the lawn of Alumni Park on University Park Campus for our 2009 Homecoming celebration. After a pre-game picnic, attendees witnessed the unfortunate Trojan defeat by the Stanford Cardinals. Yet no matter what the score, homecoming has become a popular event, an opportunity for alumni to meet current students and reconnect with each other and with Division faculty on a beautiful fall day.



## Staying in Touch

### 1975

**WINKIE SONNEFIELD, MA, PT,** has received the Distinguished Alumnus award of the USC Division of Biokinesiology and Physical Therapy, bestowed “for professional accomplishments with high distinction.” Ms. Sonnefield, director of rehabilitation and wellness at St. Jude Medical Center in Fullerton, Calif. and member of the Division Board of Councilors, received the award in August 2009 during the faculty retreat.



Dr. Gordon presents Winkie Sonnefield with the 2009 Distinguished Alumnus award.

### 1993

**ANDREA AVRUSKIN, PT, DPT, ATC, LAT,** was quoted in the Web edition of *ADVANCE for Physical Therapy & Rehab Medicine*® (“Celebrating PT Month,” by Laura Fritsky, October 6, 2009). Dr. Avruskin is on the staff of Select Physical Therapy in Las Vegas and serves as public relations committee chair of the Nevada Physical Therapy Association. She coordinated The Great Peanut Butter (& Jelly!) Challenge of 2009, a food drive that involved more than 35 physical therapy clinics in Nevada. “Good nutrition is an important building block on which physical activity and fitness depend,” Dr. Avruskin said, “so we are donating a protein-source food to local food banks to help support and encourage good physical fitness.”

### 2002

**YVETTE FLORES, PT, DPT,** is happy to announce her new physical therapy practice, which opened in 2009 in Santa Monica. She has created several treatment programs for both the orthopedic and pediatric populations. “One of our most popular programs utilizes the 830 cold laser,” she said, “a modality frequently requested for pain resolution.” Dr. Flores writes a monthly newsletter for patients and prospects as well as articles she shares with referring physicians.

### 2004

**ANNA KOTULA, PT, DPT,** owns a private practice that focuses on outpatient orthopedics, pediatrics, and wellness. The wellness component involves providing fitness evaluations and plans, and contributing to the design and implementation of a corporate wellness program. Dr. Kotula has been writing articles about physical therapy for an Ojai community newsletter to explain how the profession can best serve the public.

### 2005

**FELICIA COLON-BARNES, DPT, CSCS,** was quoted in the Web edition of *ADVANCE for Physical Therapy & Rehab Medicine*® (“Celebrating PT Month,” by Laura Fritsky, October 6, 2009). She said that her clinic, Beyond Physical Therapy in Marina del Rey, is starting a balance class for patients and community members. “We want these class members to put their best foot forward in order to prevent falls and improve their overall function,” Dr. Colon-Barnes said.

## ► SPOTLIGHT

### Julie McCarthy's Action-Packed Year

**JULIE MCCARTHY, PT, DPT '06,** was featured in two segments of KGO-TV's *View from the Bay* in 2009. She demonstrated an ab workout (February 22) and “Easy Stretch and Strength” (March 14) on the popular show, broadcast in the San Francisco Bay Area. But these appearances were just icing on the cake for Dr. McCarthy, human dynamo.

She is working full-time at the California Pacific Medical Center's outpatient wellness facility and at the hospital's in-patient facility on the weekends. “As a new grad, I was looking for both outpatient and in-patient experiences to keep up my skills in both arenas,” she said.

“I also love teaching fitness classes, so I teach everything from a functional fit class to kickboxing at multiple gyms in the Bay Area early in the morning. On the PT front, I am the student liaison on the executive committee of the Golden Gate District of the California Physical Therapy Association and also sit on the membership and communications committee. I was inspired to promote our profession after meeting Stephanie Kaplan at a PR Summit.”

In her “spare” time, Dr. McCarthy guest lectures at the San Francisco Road Runners Club, Team-In-Training, and Team Luna Bar. In October, she led the San Francisco Nike Marathon Warm-Up for 10,000 runners and then joined the run. She keeps mentally and physically fit by regularly competing in triathlons (“in my USC jersey”) and placing at the top of her age group.



Dr. Julie McCarthy





## ALUMNI NEWS

### A Foot-Stomping Time at Grape Crush 2009

Perfect weather, colorful fall foliage, rolling green meadows, and the expansive Los Olivos vineyards set the scene for PTAA's Grape Crush 2009 on November 7, expertly hosted by Christie Macdonald Schaffer (DPT '98) and Larry Schaffer. After a private tour and wine tasting at Fess Parker Winery, PTAA members had a blast stomping freshly picked grapes. Later, everyone gathered at Petros Los Olivos restaurant to watch USC trounce Arizona State and enjoy classic Greek cuisine. It was a memorable event for the 27 attendees. Proceeds benefit the PTAA scholarship fund.

