

U N I V E R S I T Y O F P I T T S B U R G H

FACETS

SCHOOL OF HEALTH AND REHABILITATION SCIENCES

FALL/WINTER 2009

TO PROTECT AND SERVE

A COLLABORATION WITH A MISSION



CONTENTS

FALL/
WINTER
2009



26



12



22



16

- 1 **From the Dean**
Cliff Brubaker
- 2 **Calendar of Events Giving**
Patty Kummick
- 3 **Access**
Dr. Kate Seelman
- 4 **Student News**
- 5 **Department News**
- 6 **Faculty News**
- 8 **Alumni News**
- 9 **School News**
- 10 **Alumni Profile**
Preparing for Combat:
Training the Tactical Athlete
- 12 **FACETS Feature**
To Protect and Serve
- 16 **Sports Medicine and Nutrition**
Feeding Body, Mind and Spirit

- 18 **Communication Science and Disorders**
Adding Value to the Most Valued Profession
- 20 **Health Information Management**
Behind-the-Scenes Officers Play Leading Roles in Military Health System
- 22 **Rehabilitation Science and Technology**
A Step in the Right Direction
- 24 **Physical Therapy**
Physical Therapy Alumni Reporting for Duty

- 26 **Occupational Therapy**
Serving on the Front Lines
- 29 **Emergency Medicine**
From EMT to Military Physician
- 30 **The Real World**
Jordan Ketch
- 32 **SRHS Donors 2009**

Publisher
Clifford E. Brubaker

Executive Editor
Patty Kummick

Writing and Design
Red House Communications

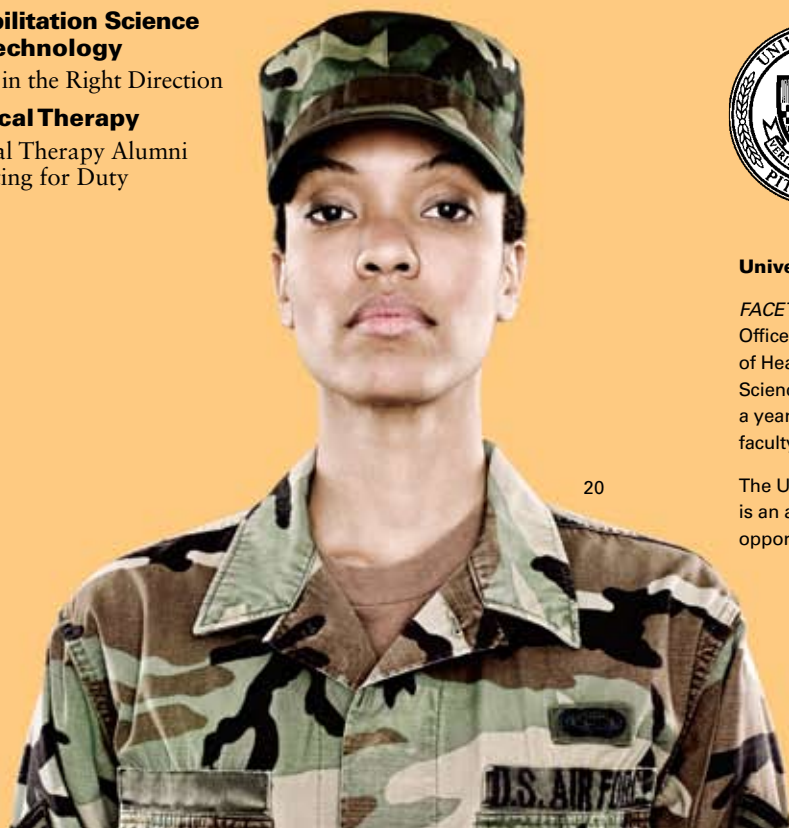
Photography
Cwenar Photography



University of Pittsburgh

FACETS is published by the Office of the Dean, School of Health and Rehabilitation Sciences. It is produced twice a year for alumni, students, staff, faculty, and friends of SHRS.

The University of Pittsburgh is an affirmative action, equal opportunity institution.



20



FROM THE DEAN



Dear Alumni and Friends of SHRS,

For the second year in succession we have welcomed a record class of new students to the School of Health and Rehabilitation Sciences. We project a total enrollment this year in excess of 1200 students. From this early vantage I am pleased to inform you that our school is off to a good start with respect to all the metrics we are able to control or substantially influence. This ebullience must be tempered, however, by the near ubiquitous economic uncertainties that have impacted virtually all institutions of higher education – including the University of Pittsburgh. Irrespective of the relative successes of individual schools, as constituent programs of the University, we all shall share equally in any actions and measures that may be necessary for the University to institute in these challenging times.

In addition to our record enrollment, the SHRS faculty and students have experienced comparable success in their scholarly pursuits. Our faculty have produced extensive and highly productive research projects. Our funded research has also increased to new levels in successive years. A significant and growing portion of our research – and funding – has been awarded by the Department of Defense for unique programs in rehabilitation and assistive technology for injured warriors and veterans provided by the Department of Rehabilitation Science and Technology (RST) under the direction of Distinguished Professor and Chair Rory Cooper. We have also experienced rapid growth in research projects for injury prevention and performance enhancement for both the 101st Airborne Division and Navy SEALs through the efforts of faculty of the Department of Sports Medicine and Nutrition (SMN) under the direction of Professor and Chair Scott Lephart. These programs and their respective projects constitute the main theme of this edition.

I shall exercise editorial privilege here to highlight unsolicited comments from two general officers of the U.S. Army. In referring to the results of the initial eight-week Eagle Tactical Athlete Injury Prevention/Performance Optimization Program (ETAP) for the 101st Airborne Division (Air Assault), MG Jeffrey J. Schloesser, commanding general of the 101st Division, offered the following comment: *“The effects of this early data have been immediate and profound as unit and medical leaders have an increased awareness of shortfalls in physical training and injury patterns. Soldiers across the Army deserve the health benefits afforded by state-of-the-art medical research. The development of innovative physical training programs will yield long-term positive results that will enhance the medical readiness and combat effectiveness of all soldiers.”* A second reference to the effectiveness of Dr. Lephart’s program was offered by Gen. Peter W. Chiarelli, vice chief of staff of the U.S. Army in testimony to the House Committee on Appropriations – Subcommittee on Defense on March 11, 2009: *“I’m excited about what the University of Pittsburgh is doing for us. They’re in the second year of a long-term study to collect just that kind of injury and performance data we need, both before the rotation and once the soldier returns, and providing the soldier the tools he needs to work on when he is deployed.”*

I trust that you will find the further elaboration of these and other programs of our school to be of interest and will experience a justifiable sense of pride as a member of our mutual SHRS community.

With kind regards and best wishes,

Cliff E. Brubaker
cliffb@pitt.edu

Calendar of Events

OCTOBER

Tuesday, October 13, 2009

15th Annual Endowed Scully Visiting Lecture Program

6:30 p.m. reception, 7 p.m. lecture, William Pitt Union, featuring Marilyn Moffat, PhD, PT, FAPTA, presenting "Physical Therapists' Roles in Combating the Diseases of Civilization."

Friday, October 23, 2009

Pitt Welcome Back Reception – All Pitt Alumni Reunion

6 – 8:30 p.m. Commons Room, Cathedral of Learning
Return to campus and celebrate Homecoming in style at a fun and festive reception prior to the fireworks display. RSVP to alumnievents@ia.pitt.edu or 1-800-ALU-PITT.
Sponsored by the Pitt Alumni Association

Health Sciences Minority Alumni Banquet

6 – 9 p.m., Ballroom B, University Club.
\$85 per person, cash bar. Hosted by the Office of Health Science Diversity. For more information, call 412-648-2066 or email pkd100@pitt.edu.

Monday, October 26, 2009

Thornburgh Family Lecture Series: Disability Law & Policy

1 – 2:30 p.m., Teplitz Courtroom, Barco Law Building, featuring U.S. Senator Tom Harkin (D-Iowa). Call 412-648-1418 for accessibility needs or questions.

October 30 – 31, 2009

32nd Annual Pennsylvania Occupational Therapy Association Conference

Station Square, Pittsburgh, Pa.

NOVEMBER

Saturday, November 7, 2009

SHRS Open House

10 a.m. – 1 p.m., Forbes Tower, Atwood Street.
An opportunity for interested students to meet with faculty, staff and current students, and tour SHRS.

Friday, February 12, 2010

2010 Winter Academy

Ritz-Carlton Resort and Beach Club, Naples, Fla.
Join fellow alumni and friends at this fifth annual University of Pittsburgh event showcasing our luminary health sciences researchers. Visit www.winteracademy.pitt.edu for further details.

March 2010

Arizona Alumni Reception

Phoenix, Ariz. More details to come!

giving



Apparently, Virginia Kaufman followed the progress and accomplishments of SHRS. However, the school was not aware of Virginia Kaufman or her interest in and quiet support of disabilities initiatives.

This past April, Ms. Kaufman passed away at the age of 90. Weeks later, SHRS and the University of Pittsburgh

learned of her generous bequest in excess of \$1 million to benefit the school's Department of Rehabilitation Science and Technology "with the aim of advancing knowledge of, and providing treatment for, disabilities and to rehabilitate those who are disabled."

Ms. Kaufman grew up in Clarion, Pa., and spent her adult life in Pittsburgh. She was a well-respected, award-winning advertising professional in an era when women advertisers were rare. And, according to a family friend, "she was deeply concerned about community and education" and was an unassuming philanthropist.

We are very grateful to Virginia Kaufman for her generosity to, and consideration of, our work in the disabilities arena. We only wish we had an opportunity to meet her, discuss in detail her interest in disabilities, and recognize her for her benevolence. Through her gift, her legacy will live on at SHRS.

Sincerely,

Patty Kummick
Director of Development

412-383-6548
pkummick@pitt.edu
4031 Forbes Tower
Pittsburgh, PA 15260



ACCESS

DR. KATE SEELMAN

Major General Patricia D. Horoho has earned a place of distinction among health care providers in both the military and civilian sectors. Current chief of the Army Nurse Corps and USO 2009 "Woman of the Year," she embodies all that is right with the military today. The evening before giving a guest lecture at Pitt, the Major General and SHRS faculty members engaged in a lively discussion about the Army and the future of health care.

An advocate for a "system of health, not just a health care system," Horoho provided a thoughtful analysis of wellness as a central concept in guiding health care practice for the future. As educators and researchers, we immediately began to explore why and how forward-thinking universities like ours can further contribute to this effort.

National health care reform is an explosive topic, but one that must be addressed. While we in the military are not engaged in the political aspect of the debate, we have been striving to implement change within our own system for several years now. We're talking about a whole culture change here, one that is fraught with challenges and opportunities. Admittedly, we have a long way to go, but I believe the successes of the military in this area can help drive changes in the nation's health care policy.

As one of the largest providers of health care services in the nation, the military is moving towards the concept of wellness with a model that embraces a complete continuum of care, from injury through rehabilitation to full reintegration within the community.

When you look at implementing the wellness model, it really takes a team of teams; one discipline should never be considered more important than another. I think it's a collaboration of capitalizing on the strengths that each of the disciplines brings together – not just to move the patient, but the patient and his or her family through the whole process to get them to the maximum level of wellness. In the case of the military, that could mean helping the wounded warrior remain on active duty, or transition back to the civilian community.

Often, we need to encourage our returning service members to learn a new skill set or participate in interventions to aid the healing process, and we're doing that. Assistive technology, information and communication technology, a combination of rehab, counseling, vocational training programs, and even partnerships with civilian businesses – these all play important roles in a successful continuum of care.

We have a commitment now from senior Army leaders that we will do everything possible to return a soldier to active duty if that is his request. So far we have 13 warriors with various prostheses who have been deployed back to Iraq. We have a blind soldier pursuing a graduate degree at Harvard so that he can teach at West Point. There are others, and they are all role models to both the military and civilian communities.

A vital component of the wellness model is collaboration with universities. I'm overwhelmed by the talent at the University of Pittsburgh and the partnership that SHRS has with Walter Reed Army Medical Center specifically. You have consistently brought the best and brightest civilian minds to share "state-of-

the-science" information on topics that are critical to those who provide care to our injured service members.

Pitt has been a huge facilitator of change within health care. Your research partnership with the Department of Defense has been instrumental in helping to better physically train our soldiers for combat. You were pioneers in bringing engineers into clinical settings to help make assessments about assistive technologies that are used by our wounded warriors, and you continually work with the Department of Veterans Affairs to improve the functionality of veteran wheelchair users. I know you have also initiated educational programs to help return veterans to meaningful work and reintegrate them into their communities. These programs, and so many others like them, embrace the overarching theme of wellness, and contribute to the complete continuum of care.

Naturally, the military will continue to rely on the University to educate and train our physicians and nurses with the advanced clinical skills they need at our medical centers and in theaters of operations. In addition, we will rely on skillful OTs, PTs, prosthetists, biomechanical engineers and other health care specialists – a combination of experts who have the right mindset and skills to create a culture of wellness with the client at the center of the team effort.

Together, we need to look at how we leverage technology. How do we transfer to clinical settings the research done in our academic centers such as regenerative hands and telerehabilitation? How do we harness the program evaluation and other capabilities within our universities to really improve the quality of care within our military institutions? At the same time, how do we share what's in our military institutions with our academic partners so we can help shape and drive future research and capacity-building in the health sciences to meet future needs? And how can we work together to drive change across the nation?

As we face the future, there is fertile ground for collaboration that I believe will lead to the acceptance of a system of health, and not simply a health care system. When you look at the vocational rehabilitation piece of the puzzle alone, I'm not sure our nation is prepared for – or understands – the large population of young service members, both male and female, who will have recovered from polytrauma and will be either seeking employment or already laboring in the workforce. There will be tremendous physical and psychological challenges that will place a demand on the civilian health care system. These veterans will have different, more complex health issues that we might not anticipate. Cooperative efforts between the military and universities may help predict what those future demands may be, and how we can best meet them.

The most important thing to remember when we look at collaboration between the university and the military is that our focus is really giving a sense of freedom to our warriors who have been injured and treated, and ensuring that they've got the right life skills to be productive citizens for the future.

Although we must continue to value each health care discipline, we must join together as a united team. Together, we can help drive change through a comprehensive, viable model of wellness.



Student News

Communication Science and Disorders

Lindsay Diethorn, AuD student, was awarded a merit-based Pitt Alumni Association Graduate Scholarship.

Michelle Petraglia, master's student, was awarded the Southwestern Pennsylvania Speech-Language-Hearing Association Student Honors. The award recognizes students for their contributions to the profession.

Health Information Management

Wayan Pulantara, master's student, was the recipient of a Fulbright Scholarship to pursue his graduate studies.

Occupational Therapy

Laura Waterstram, MOT student, was awarded the Department of Occupational Therapy 2009 Award of Scholarly Excellence for her scholastic achievement and scholarly excellence in research activities.

Michelle Anderson, MOT student, was awarded the 2009 Pennsylvania Occupational Therapy Association Scholarship.

Betsy Boyce, Natalie D'Angelo, Benjamin Gross and **Melissa Stauffer**, MOT students, were each awarded a 2009 Jewish Healthcare Foundation Patient Safety Fellowship.

Benjamin Gross and **WIKAR KADHIM**, MOT students, were members of the team selected as the 1st Runner Up of the 2009 Interprofessional Student Competition, Advancing Interprofessional Student Education at the University of Pittsburgh Schools of the Health Sciences.

Melissa Stauffer, MOT student, went to Corfu, Greece, this summer on the Greek Room Scholarship obtained from the University of Pittsburgh Nationality Rooms to study equine assisted therapy with the Silva Project, a non-profit organization dedicated to the preservation and breeding of the endangered Skyros horse.

WIKAR KADHIM, MOT student, traveled to Amman, Jordan, this summer on the Fred C. Bruhns Memorial Award from the University of Pittsburgh Nationality Rooms to study the delivery of occupational therapy services to children with autism and cerebral palsy. Kadhim is being supervised by Dr. Sana Abu-Dahab, a recent graduate of the doctoral program of SHRS.

The Distinguished Occupational Therapy Advocating Committee of the University of Pittsburgh Student Occupational Therapy Association raised \$575 for the American Occupational Therapy Political Action Committee through a "PAC the House" fundraising event.

Courtney Baressi, Heidi Carpenter, Natalie D'Angelo, Susanne Hirsch, Julie Kearney, Ashley Keene, Amanda Miller, Lori Sopko, Melissa Stauffer, Anne Marie Sweeney, Kim Thomas, and **John Willet**, MOT students, participated in the annual Arthritis Walk sponsored by the Western Pennsylvania Chapter, Arthritis Foundation.

Dr. Ketki Raina, assistant professor, and MOT students **Elyse Aufman, Christine Hammer, Emily McCalmont, Leah Oman, Abigail Schaffer, Jill Smolenski,** and **Kim Troiano** represented the Department of Occupational Therapy at the Assistive Technology Day for the University of Pittsburgh Health Career Scholars Academy.

Dr. Denise Chisholm, associate professor, and MOT Students **Alisha Cousins, Ashley Keene, Shelley McCauley, Melissa Stauffer,** and **Jeanna Thomas** presented a "Hands-On Occupational Therapy Session" for the 7th Annual Southwest Pennsylvania Area Health Education Center Summer Health Career Academy.

Physical Therapy

Colin Gundling, DPT student, won the overall male category of the Pittsburgh Olympic Distance Triathlon on July 26. In his fifth year competing in this triathlon, Gundling completed a 1500 meter swim, 40K bike race and 10K run in a time of 2:00:51. He was one of 237 men competing in the event. He plans to compete in his first half-ironman distance triathlon in September and will compete in the Marine Corps Marathon, his first marathon-distance race, in October.



Colin Gundling prepares for the bicycle portion of the 2008 Pittsburgh Triathlon.

Kristen Hohl, DPT student, also competed in the Pittsburgh Distance Triathlon and finished 21st out of a total of 76 women competitors (she placed 144th overall). This was Hohl's first Olympic distance race.

Rehabilitation Science and Technology

Students **Nahom Beyene, Eric Brindle, Padmaja Kankipati, Mike Turkovich,** and **Hongwu Wang** were recognized at the RESNA annual conference in New Orleans as winners in the scientific paper competition awards.

Brian Harvey and **Alexandra Jefferds** were finalists in the design competition at RESNA's annual conference.

Garrett Grindle and **Hongwu Wang**, doctoral students, visited Capitol Hill this summer to demonstrate a Personal Mobility Manipulation Appliance to senators and their staffs. The students created a robotic wheelchair equipped with four computers, sensors and computer-driven arms and hands. Controlled by eye motion, the robotic arms can open doors, retrieve food and do other chores. The chair will undergo human testing in the near future.

Sports Medicine and Nutrition

Jillian Painter, coordinated masters in dietetics student, received the Pennsylvania Dietetic Association's 2009 Outstanding Dietetics Student Award. The award recognizes emerging leadership, academic achievement and community service.

Monisha Panda, coordinated masters in dietetics student, was one of only eight students from across the country elected as a student representative on the 2009-2010 American Dietetic Association's (ADA) Student Council Advisory Committee. Panda was also invited to attend the ADA Leadership Conference in Dallas, Texas.

Department News

Health Information Management

In June, the department organized a lecture by Professor K. Ganapathy, president of Apollo Telemedicine Networking Foundation, India. The presentation illustrated how regional, national and international telemedicine consultation and educational activities are done cost effectively; the use of various telecommunication technologies and their benefits and barriers were also discussed.



Event organizer Dr. Sajeesh Kumar, assistant professor, and Dr. Mervat Abdelhak, department chair, welcome lecturer Dr. K. Ganapathy.

Rehabilitation Science and Technology

The U.S. Department of Veterans Affairs awarded a three-year \$3.64 million contract to the department. The award initiates the review, analysis and development of Assistive Technology (AT) Labs at the VA's Polytrauma Rehabilitation Centers in Richmond, Va., Tampa, Fla., Palo Alto, Calif. and Minneapolis. Given the geographic diversity of the centers across the country, in addition to in-person interactions at the sites, the project will utilize telerehabilitation and health information technologies developed at SHRS. This award enables RST Assistant Professor Mark Schmeler, project director, and his team to build on their experience in AT and program development.

The U.S. Department of Veterans Affairs also notified the department that the Human Engineering Research Laboratories (HERL) was named a VA Center of Excellence for Wheelchairs and Associated Rehabilitation Engineering. The lab will receive core funding of \$1 million annually for five more years. This is the third time HERL has received the funding stream.

For the second consecutive summer, the department has hosted high school science teachers from area schools participating in Research Experiences for Teachers (RET). The RET, part of the department's Quality of Life Technology Engineering Research Center, assists teachers in creating and adapting curricular modules that they will employ in their own science classes this fall. The goal of the project is to expose a broader cross-section of high school students to engineering and related careers. One of the teachers' projects was "Device for Assistance in Donning a Prosthetic Leg." Sondra Balouris, RST instructor, is a principal investigator with the NSF-funded project.

Actress Bo Derek and recording artist Taylor Dayne (standing fourth and fifth below) joined the HERL/Walter Reed Army Medical Center Research Team for a group photo at the 23rd National Disabled Veterans Winter Sports Clinic in Snowmass Village, Col., in March.



Sports Medicine and Nutrition

In June, the Department presented a continuing education seminar on "Medical Nutrition Therapy for Inflammatory Bowel Disease" for the Clinical Dietetics and Nutrition program's supervised practice preceptors. Lori Cherok, instructor and clinical coordinator with the program, presented the free seminar offered for all preceptors to serve as a token of appreciation for the commitment to training and educating students in the Coordinated Masters in Dietetics program. Registered dietitians and dietetic technicians who mentor students in local hospitals, nursing homes, dialysis clinics and community nutrition sites attended.



Faculty News

SHRS welcomes six new faculty members to its ranks:

Dr. Mita Lovalekar, has joined the Department of Sports Medicine and Nutrition as an assistant professor. Lovalekar is a physician trained in India and she earned her MPH and PhD in Epidemiology at the Graduate School of Public Health, University of Pittsburgh. Her research interests include injury epidemiology and surveillance, injury prevention, chronic disease epidemiology and distance learning in epidemiology.

Dr. Qi Mi is an assistant professor in the Department of Sports Medicine and Nutrition. His research interests include developing mathematical models of relevance to sports training and injury rehabilitation, spinal cord injury, diabetic foot ulcers, and other settings in which inflammation and tissue damage/healing are implicated. He received his undergraduate degree from Nanjing University, China, and his master's and doctoral degrees from the University of Pittsburgh.

Takashi Nagai, instructor in the Department of Sports Medicine and Nutrition, serves as the director of the Human Performance Research Center, Fort Campbell, Ky., where he will be involved with the department's Department of Defense research with the U.S. Army 101st Airborne Division for Injury Prevention/Performance Optimization.

Dr. Deborah A. Opacic has been hired to develop a Physician Assistant Program and serve as program director. Opacic received her Bachelor of Science degree in Physician Assistant Studies and her master's degree in Medical Science from St. Francis College. She received her doctorate in Educational Leadership from Duquesne University.

Martha Petersen will serve as academic coordinator, overseeing curriculum development delivery and evaluation in the Physician Assistant Program. She received a Bachelor of Arts degree in Physiological Psychology from Adams

State College, Alamosa, Colo., and Bachelor of Science degree in Physician Assistant from Trevecca Nazarene College, Nashville, Tenn., and a Master's of Public Health degree from East Stroudsburg University.

Sara Peterson brings her experience as an instructor to the new Prosthetics and Orthotics Program. She received her undergraduate degree from the University of Minnesota, Metropolitan State, St. Paul, Minn., and a Masters in Business Administration from Baker College, Flint, Mich. She also completed Orthotic and Prosthetic Practitioner and Technician programs at Century College, St. Paul, Minn. She relocated to Pittsburgh from Greenville, N.C., where she served as staff certified prosthetist/orthotist at a 750-bed trauma and rehab center.

Communication Science and Disorders

Dr. Paula Leslie, associate professor, was named to The Health 100 by her alma mater, Leeds Metropolitan University, West Yorkshire, England. Leeds invites alumni who have excelled in their chosen profession to become members of this group for a three-year period. Members are asked to give a guest lecture, provide placements or student exchanges, provide career advice, mentor or other such partnership activities.

Dr. Catherine Palmer, associate professor, received the Beltone Electronics Larry Mauldin Award for Excellence in Education at the annual convention of the American Academy of Audiology in April 2009 in Dallas, Texas. Determined by industry peers, the award is given to an industry leader committed to continuing education and unselfishly giving back to the profession, the community and the hearing impaired.

Dr. Scott Yaruss, associate professor, received the Editor's Award from the "Contemporary Issues in Communication Science and Disorders" journal for a paper he co-authored titled "Development of a prototype questionnaire to survey public attitudes

toward stuttering: Reliability of the second prototype."

Health Information Management

Dr. Mervat Abdelhak, chair and associate professor, presented "International Collaborations: Graduate Programs in Japan and Saudi Arabia" at the American Health Information Management Association Assembly on Education Symposium, Las Vegas, Nev.

Dr. Bambang Parmanto, associate professor, participated in filming of the international welcome videos developed by the Pittsburgh G-20 Partnership. In the video, Parmanto welcomes guests in Indonesian. He was also interviewed by Pittsburgh Magazine for a special G-20 edition featuring individuals living in Pittsburgh who hail from the countries represented at the September Summit.

Dr. Valerie Watzlaf, associate professor, was appointed to the National Research Advisory Council of the AHIMA Foundation. The council provides guidance to the foundation on a national policy and HIT/HIM health services research agenda that addresses significant health care issues affecting the HIM practices, profession and the health care industry.

Dr. Leming Zhou, assistant professor, presented a poster "Predicting Coding Regions in Sequence Alignments with Spaced Seeds" at the 9th Workshop on Algorithms in Bioinformatics, University of Pennsylvania, Philadelphia.

Occupational Therapy

Dr. Nancy Baker, associate professor, was promoted to associate professor with tenure. Baker was also elected to the American Occupational Therapy Foundation's Academy of Research. This prestigious honor recognizes occupational therapists who have made exemplary contributions toward the science of occupational therapy. Baker received this honor for her research involving workers' health and the performance of work tasks.

Dr. Margo Holm, professor, received a Pitt 2009 Innovation in Education Award to assess student inter-observer reliability when using criterion-referenced clinical tools. The awards are made through the Office of the Provost's Advisory Council on Instructional Excellence (ACIE). The ACIE seeks to identify high-quality proposals that show promise for introducing innovative, creative approaches to teaching that can be adapted for use in other courses. Holm's project was one of 11 selected this year.

Holm and Dr. Joan Rogers, professor and chair, supervised data collection on older adults aged 71-85 and adults aged 18-85 with diabetes, as part of the NIH Toolbox initiative. They collected data to validate the somatosensory measures.

Joanne Baird, assistant professor, received the 2009 Pennsylvania Occupational Therapy Association Fieldwork Educator Award.

Dr. Elizabeth Skidmore, assistant professor, received the 2009 Pennsylvania Occupational Therapy Association Academic Educator Award.

Drs. Baker, Holm, Rogers, Min-Mei Shih and Skidmore presented at the 2009 American Occupational Therapy Association Annual Conference.

Physical Therapy

Dr. G. Kelley Fitzgerald, associate professor, and **Dr. James (Jay) Irrgang**, associate professor, School of Medicine, were named Catherine Worthingham Fellows of the American Physical Therapy Association. They were recognized at the APTA annual convention in Baltimore, Md., in June. The designation is given to those individuals whose work has resulted in lasting and significant advances in the sciences, education and practice of the profession of physical therapy.

Rehabilitation Science and Technology

Dr. Rory Cooper, distinguished professor and chair, was honored recently through proclamations from the Senate and House of Representatives of the Commonwealth of Pennsylvania for his participation and level of achievement at the National Veterans Wheelchair Games. Cooper was also cited in the July 27, 2009 issue of the Congressional Record by Rep. John P. Murtha. At the 2009 Games in Spokane, Wash., Cooper was recognized for being a five-time gold medal winner (below).



Cooper also won the Pittsburgh Marathon, Handcycle Division, in May. His time: 1 hour, 52 minutes. And his colleagues from the Human Engineering Research Laboratories (HERL) competed in the Marathon Relay in support of the National Spinal Cord Injury Association.

Dr. Katherine Seelman, associate dean of Disability Programs and professor, presented "Guidelines for Disability Diversity" as part of Pitt's Office of Health Sciences Diversity's speaker series "Diversity in Practice."

Elaine Trefler, assistant professor, received the Mentor Award at the RESNA annual conference in New Orleans in June.

Sports Medicine and Nutrition

Dr. Kevin Conley, assistant dean for undergraduate studies and program director, Athletic Training Program, and **Amy Aggelou**, instructor and clinical coordinator, Athletic Training Program, submitted a proposal that was selected for funding under the 2009 Innovation in Education Awards Program. The awards are made through the Office of the Provost's Advisory Council on Instructional Excellence (ACIE). The ACIE seeks to identify high-quality proposals that show promise for introducing innovative, creative approaches to teaching that can be adapted for use in other courses.

One of 11 selected teaching proposals, Conley and Aggelou's submission, titled "Creating Clinical Competence through Interactive Technology," creates a computer program to help train athletic trainers and assess their competence. The program's format could be beneficial to an array of medical disciplines taught at Pitt.

Dr. Kim Crawford, assistant professor and coordinator, Graduate Studies in Clinical Dietetics and Nutrition, and **Dr. Diane Helsel**, assistant professor, participated in the National Institutes of Health Office of Dietary Supplements' "Dietary Supplement

Research Practicum 2009." This annual intensive course provides essential knowledge of dietary supplements to academic faculty and their doctoral and post-doctoral students.

Dr. Mita Lovalekar, assistant professor, was nominated for induction into the Delta Omega National Honor Society for Schools of Public Health. She was also recognized with an Outstanding Student Award from Pitt's Graduate School of Public Health.



Alumni News

Communication Science and Disorders



Alumni, faculty, and students attending the American Audiology Association annual convention in Dallas in April gathered for a reception hosted by the department.

Emergency Medicine

Dr. Gregg Margolis, (HRS '94) accepted a one-year fellowship with the Robert Wood Johnson Health Policy Fellowships Program in Washington, D.C., as part of the Robert Wood Johnson Foundation with assistance from the Institute of Medicine of the National Academies. The first EMS professional to participate in the program, Margolis will have the opportunity to work directly with top figures in federal health policy in the nation's capital and will be able to gain an insider's perspective of the political process, develop leadership skills, and build a strong professional network. Margolis will be taking a leave from his post as associate director of the National Registry of EMTs in Columbus, Ohio, to complete the fellowship.

Health Information Management



This past spring, AHIMA members attended Hill Day at our nation's capital to call on their states' senators and representatives to help promote current issues in electronic health records and funding for allied health education, among others. HIM alumni in attendance included (left to right) Wannetta Peeler Edwards (HIM '82), Karen Collins Gibson (HIM '74), Denise Duniyak (HIM '81), and HIM Associate Professor Valerie Watzlaf (HIM '79).

Denise Duniyak (HIM '81) has been elected secretary of the Pennsylvania Health Information Management Association for the 2009-2010 term.

Daniel Pothen (HIM '99) has been invited to serve on the Centers for Medicare & Medicaid Services Center for Medicare Managements' Advisory Panel on Ambulatory Payment Classification Groups for a four-year term. Pothen is the director of Clinical Informatics and Health Information Services at Mission Hospital, Mission Viejo, Calif.

Dr. Karen Wager (HIM '82) received the 2008 Governor's Distinguished Professor Award – one of 10 professors statewide to receive the honor. She serves as the executive director of Student Affairs and associate professor of Health Administration and Policy at the Medical University of South Carolina's College of Health Professions.

Physical Therapy

Dr. Julie Fritz (PT '98) received the Jules M. Rothstein Golden Pen Award for Scientific Writing at the American Physical Therapy Association annual convention in Baltimore, Md.

Fritz was recognized for contributing to the growth of Physical Therapy as an author of papers, letters and commentaries; and as a collaborator, reviewer and Evidence in Practice advisor. She currently serves as an associate professor at the University of Utah Department of Physical Therapy and outcomes research scientist with Intermountain Healthcare Inc. in Salt Lake City.

Paul Rockar (PT '81) was recently elected vice president of the American Physical Therapy Association Board of Directors. He has served on the board since 2005.

School News

The University of Pittsburgh hosted a conference for disability rights leaders from the European Union and the United States. The June 12-13 conference was sponsored by SHRS in conjunction with the European Union Center of Excellence and European Studies Center of the University Center for International Studies (UCIS).



Pictured from left: Alberta Sbragio, the Mark A. Nordenberg University Chair and director, European Union Center of Excellence and European Studies Center; Ginny Thomburgh, director, American Association of People with Disabilities' Interfaith Initiative; Dick Thomburgh, Pitt emeritus trustee and former U.S. attorney general and governor of Pennsylvania; Chancellor Mark A. Nordenberg; Cliff Brubaker, dean, SHRS; and Dr. Katherine Seelman, professor, Department of Rehabilitation Science and Technology and associate dean of disability programs.

An overview of the program is available at <http://www.ucis.pitt.edu/euce/events/conferences/Accessibility/index.html>.

Twenty undergraduate students, pictured below, traveled to Belfast, Northern Ireland, and Dublin, Ireland, this past spring as part of an SHRS study abroad field trip. Organized and coordinated by **Dr. Janice Vance**, assistant professor and director of Undergraduate Education, Department of Communication Science and Disorders the program, in its fourth year, attracted students from SHRS's programs in Communication Science and Disorders, Rehabilitation Science, and Clinical Dietetics and Nutrition.

One objective of the 17-day intensive study experience is to explore health care and education policy and services abroad, with specific attention paid to adult rehabilitation services and services for children with disabilities, and compare them to those in the U.S. Students also develop interdisciplinary understanding and examine multi-disciplinary models of care



in schools, clinics and hospitals in Ireland.

As part of the 2009 visit, the U.S. Consul General to Northern Ireland, **Susan Elliot**, hosted a reception for Vance; **Dr. Kevin Conley**, assistant dean of Undergraduate Programs and assistant professor, Department of Sports Medicine and Nutrition; **Lisa McDermott**, clinical instructor, Department of Sports Medicine and Nutrition; **Leslie-Ann Smedley**, from Pitt's Study Abroad office; the SHRS students; and, over 60 education and health professionals in Belfast who participated in the program.

This spring, SHRS held its annual Scholarship Lunch to recognize 53 students receiving scholarships or awards from 23 funds established through the school.



Christin Donofrio (center), DPT student, meets with her benefactors Paul and Judy Rockar.



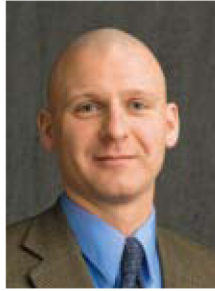
SHRS Founding Dean Anne Pascasio joins recipients of her scholarship fund, (left to right) Shelley McCauley, MOT student; Alyssa Meisenhelter, Rehabilitation Science undergraduate student and Sarah Chunko, DPT student.



Many students and junior faculty benefited from the Bruce Baker Travel Award and Student Trainer Award. Pictured with Baker, third from right, are Amanda Gillespie, Communication Science and Disorders, Caitlin Feeney, Occupational Therapy, Tom Kovacs, Communication Science and Disorders; Ana Souza, Rehabilitation Science and Technology, and Gustavo Almeida, Physical Therapy.



PREPARING FOR COMBAT: Training The Tactical Athlete



When Dr. John P. Abt was defending his doctoral dissertation in 2004, he expected his research on the effect of fatigue on running and

impact would be helpful to professional athletes who stress their bodies day after day as they strive to be the strongest competitors in their fields. But shortly after earning his PhD and joining the SHRS faculty, Abt put his expertise to work for an entirely different audience – one whose very lives depended on physical performance.

As the research coordinator for the Department of Sports Medicine and Nutrition's Department of Defense initiative, Abt applies Pitt's Sports Medicine elite athlete research model for injury prevention and performance optimization to the "tactical athletes" serving in the military. His research team currently works with soldiers from the U.S. Army 101st Airborne Division (Air Assault) at Fort Campbell, Ky., and Navy SEALs from Little Creek, Va., in order to enhance their physical readiness and prevent musculoskeletal injuries in training and during deployment.

This collaboration between the University of Pittsburgh and the Department of Defense is certainly a career-defining project for Abt, but he offers another reason this project is so important. It is an opportunity for him and his team to have a positive impact on the lives of thousands of fellow Americans.

Abt says that, like professional athletes and Olympic competitors, elite military



personnel are driven individuals who are required to perform intense tactical maneuvers under extreme conditions. The risk and incidence of unintentional musculoskeletal injuries are high.

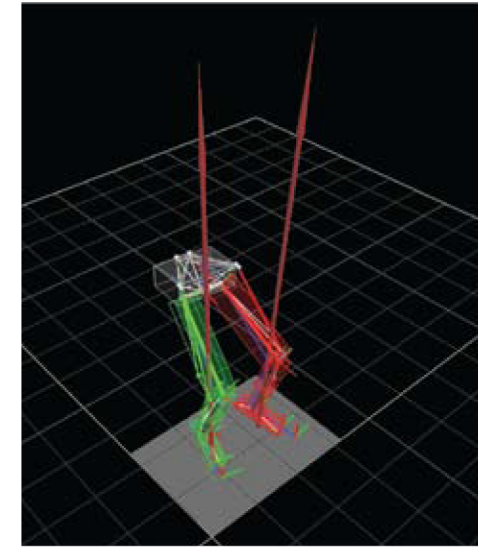
"The similarities between elite athletes and combat soldiers are remarkable," notes Abt. "The Army was interested in scientifically identifying injury risk factors for their personnel, and we had that capability."

The Department of Sports Medicine and Nutrition went to Fort Campbell and Little Creek and replicated the layout and functionality of its world-renowned Neuromuscular Research Laboratory (NMRL). The NMRL is typically used for studying and publishing research data involving athletes' biomechanics, neuromuscular control, and physiology as it relates to injury. "Through our testing and analysis, we're able to train the soldiers to be more athletic in order to better meet the demands of the current style of conflict they encounter," Abt explains.

"The Army was interested in scientifically identifying injury risk factors for their personnel, and we had that capability."

Each laboratory is outfitted with sophisticated testing instrumentation that allows researchers to perform kinematic and kinetic modeling during simulated tactical operations. They measure joint strength and stability of the service members, body composition and cardio-respiratory fitness, among other things.

"We know the soldiers repeatedly strap on loads in excess of 30 percent of their body weight and jump out of Humvees, for example, so we simulate that action in the lab," says Abt. "Computerized data allows us to identify physiological deficiencies and see what we need



to work on. The soldier is a unique tactical athlete requiring maximal development of athletic and skill-related performance, including the interaction of aerobic endurance, anaerobic endurance, muscular strength and endurance, power, agility and reaction ability. We can then develop specific training models to address the identified deficits and maximize each athletic and skill-related performance component to ensure the tactical athletes are a viable force for deployment."

Abt's training at Pitt prepared him well to lead this landmark study. One of only two SHRS alumni to have received all of his degrees from programs within the Department of Sports Medicine and Nutrition, Abt understood the importance of a multidisciplinary and collaborative approach to managing a project of this magnitude. "We also had to be very conscious of the difference between the 101st Airborne Division and the Navy SEALs. It was important to respect the uniqueness of these two groups, and to develop our protocol based on the required tasks and their specific needs," admits Abt.

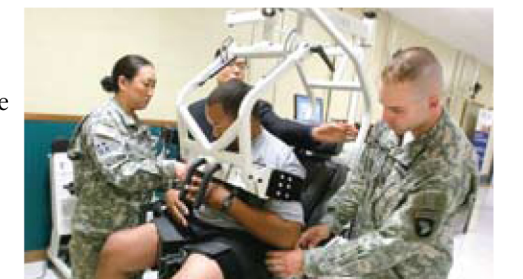
Like any research project, Abt says they are learning a lot along the way. Although there have been challenges, the primary goal of the project – to reduce overall injury – remains the same.

To date, Abt and his team have collected data on 386 service

members at Fort Campbell that revealed musculoskeletal injury risk factors, physiological deficiencies, weight management and nutritional needs. The service members then participated in the Eagle Tactical Athlete Program (ETAP) to improve their strength, power, endurance and agility. So far, two completed trials have shown that the soldiers of the 101st who completed ETAP training have improved physical readiness for combat by as much as 27.5 percent. The men and women who participated in the study will be retested after deployment, and the program is being rolled out to other units on the post.

According to Major General Jeffrey Schloesser, U.S. Army Commanding General, 101st Airborne Division (Air Assault) at Fort Campbell, "The effects of the data from the University of Pittsburgh research have been immediate and profound ... implementation in the next phase of the project will yield long-term positive results that will enhance the medical readiness and combat effectiveness of all soldiers."

Abt credits his mentor, Dr. Scott Lephart, with opening his eyes to the opportunities of scientific research. As a professor, Abt hopes to instill the same passion in his students. He feels the ETAP initiative offers tremendous benefits for young researchers. "They're able to learn the practical application of biomechanical and human performance testing and interpretation of data in the context of a very important subject population," claims Abt. "We're working at improving the readiness of our military men and women. I can't think of a more rewarding use of research."





TO PROTECT AND SERVE

THE SOLDIER STANDS TALL,
EYES FOCUSED ON A DISTANT POINT,
RIGHT HAND RAISED IN A CRISP SALUTE.
THE FUTURE BECKONS. THE UNIFORMED
SERVICE MEMBER RESPONDS.
PREPARED. CONFIDENT. READY TO RISE
TO THE CHALLENGES THAT LIE AHEAD.

Right now, nearly 1.5 million men and women are on active duty in the armed forces, defending our country, our citizens and all we hold dear. Another 1.5 million are on reserve, waiting for their turn to lead and serve.

Eerily, nearly the same number – 1.4 million distinguished military personnel – serve on yet another mission. They are disabled veterans, wounded warriors who are trying to find a place in their altered world.

Within these two populations of the military, two unique problems arose. How can we better prepare those men and women who are training for combat, and how can we improve their rehabilitation if they return injured? Dedicated researchers in both the Department of Sports Medicine and Nutrition and the Department of Rehabilitation Science and Technology are determined to find the answers.

Strength Through Partnerships

Dr. Scott Lephart, chair of the Department of Sports Medicine and Nutrition and principal investigator in an ongoing study sponsored by the Department of Defense (DOD), believes that partnerships are the key to success. “There absolutely should be more military-private collaboration,” says Lephart. “The military has a desire to form collaborations in areas where they don’t have the expertise.”

Clearly, Lephart and his sports medicine team have knowledge and expertise in biomechanics and performance optimization. For more than 20 years, they have been researching ways to improve and train sports teams, such as the Pittsburgh Steelers and Penguins. Operating on the premise that military personnel could be trained in much the same way as elite athletes, Lephart’s team proposed the Eagle Tactical Athlete Program (ETAP). The initiative uses specialized sports medicine techniques to prepare pre-deployed troops to be the strongest and fittest they can be to avoid or reduce injury in the field.

Programming began in October 2006 and by January 2007, operations started with the 101st Airborne Division (Air Assault) based in Fort Campbell, Ky. Within six months, the Pitt team was asked to develop a similar program for the Naval Special Warfare SEAL operators at Little Creek, Va.

Now in its third year, ETAP has been embraced by all facets of the military, both medical and operational. “We’re finally putting the science behind the concept that every soldier is an athlete,” says Lt. Col. Mark McGrail, division surgeon for the Army’s 101st Airborne (Air Assault) Division.

Captain Chaz Heron, commander of Naval Special Warfare Group TWO, notes, “The SEAL himself is the primary weapons platform of Naval Special Warfare. There is an imperative need to extend the operational life and maximize the battlefield performance of the Operator.” After the successful implementation of Pitt’s Injury Prevention and Human Performance Research Project – Little Creek, the Navy has approved a second SEAL installation at Stennis Space Center in Mississippi. Together, the DOD and the United States Special Operations Command (SOCOM) have allocated in excess of \$7 million in research for ongoing and future work.

Lephart comments, “I think they understand that we respect what they do and that we want to share our expertise with them. We always made it very clear to the military that this is your program. We will do everything we can to make it work for you.”

By all accounts, ETAP is working. Two clinical trials at Fort Campbell have been completed, and in both, participants’ scores on the Army physical fitness test improved significantly as did their ability to complete tasks in the field and in the

lab. The program is currently being rolled out to all 25,000 soldiers in the 101st Division. “This is a cultural shift,” explains Lephart. “The University of Pittsburgh is changing the way the U.S. Army prepares soldiers for combat.”

Praise From The U.S. Army

On March 10, 2009, Lephart briefed Brigadier General Timothy K. Adams, assistant surgeon general, and the Vice Chief of Staff of the U.S. Army Gen. Peter W. Chiarelli, regarding research activities at Fort Campbell, as well as research examining the effects of soldier load on the biomechanics and physiological responses of the individual soldier. The following day, in his testimony before the Committee on Appropriations – Subcommittee on Defense, General Chiarelli praised the Pitt-DOD collaboration. “I’m excited about what the University of Pittsburgh is doing for us. They’re in the second year of a long-term study to collect just that kind of injury and performance data we need, both before the rotation and once the soldier returns, and providing the soldier the tools he needs to work on when he is deployed.”

Even more importantly, the ETAP is valued by the soldiers. Lephart recalls asking one young clinical trial volunteer soldier why he was willing to spend hours being monitored and tested. “The soldier said, ‘The better you allow me to do my job, the greater the chances that I’ll come back safely.’ Putting our knowledge and expertise to work for those who are putting their lives on the line for us truly energizes me.”

Says Lt. Col. Rusty Rowe, command surgeon of Special Operations Command Europe and former division surgeon of the Army 101st Airborne, “We’re all excited about making better soldiers through science. Our soldiers want to be better, stronger, faster, able to endure more ... this helps them to do that.”





Transitioning The Wounded Warrior

Even with improved physical training, uniformed service members constantly face the prospect of injury in the field. When that occurs, how does a nation welcome home a wounded warrior who may be suffering from lost limbs or a broken spirit? How does the workforce adapt to a new employee who has special needs, or needs to learn new skills? How does a community relate to a disabled veteran – someone who may look and act differently than we remember?

The issues that surround returning veterans are as many and varied as the wounded warriors themselves. For more than 20 years, Dr. Rory Cooper,

chair and distinguished professor, Department of Rehabilitation Science and Technology (RST), has partnered with the Department of Veterans Affairs (VA), Walter Reed Army Medical Center (WRAMC) and other national and local organizations to provide troops wounded and disabled in battle with the greatest level of assistive technology and support.

Sharing State-Of-The-Science Technology

A veteran of the U.S. Army and a wheelchair user himself, Cooper has dedicated his life to improving the mobility and function of people with disabilities. More than five years ago he and Col. Paul Pasquina, chair, Physical Medicine and Rehabilitation, and

medical director, Amputee Program, WRAMC, joined forces to sponsor a workshop that has evolved into a landmark series.

November marks the fifth anniversary of “The State-of-the-Science: Research to Clinical Practice” symposia series, which attracts physicians, therapists, counselors, social workers and rehabilitation engineers. The symposia series provides the opportunity to learn more about how the latest research findings can translate into clinical practice to ensure the highest quality of care for military personnel and veterans with disabilities.

Held quarterly at WRAMC, the day-long symposia are sponsored by the Human Engineering Research Laboratories (HERL) of the University of Pittsburgh, the VA and Paralyzed Veterans of America (PVA). Pasquina, Cooper and Dr. Michael Boninger, medical director of the HERL, serve as course directors for the series.

Thanks to the efforts of Cooper and Lephart, SHRS enjoys a solid and mutually beneficial relationship with the U.S. Armed Forces.

During the past five years, more than 100 of the nation’s best and brightest rehabilitation scientists have been featured, including SHRS faculty Drs. Katya Hill, Mike McCue, Mike Pramuka and Katherine Seelman. Experts have presented on a wide spectrum of topics that range from virtual reality and traumatic brain injury to polytrauma care and regenerative technology.

In addition to the symposia presenting state-of-the-science research, a hands-on continuing education component is offered annually through the joint



efforts of the University of Pittsburgh and UPMC’s Center for Continuing Education in the Health Sciences. The two-day course gives attendees continuing education credits and hands-on experience in advanced technologies such as ultrasound techniques and assistive robotic systems. Dr. Cooper and staff from RST donate their time in an effort to help train the caregivers of wounded military personnel.

Road Map For The Future

In May 2005, Cooper and Pasquina began another collaboration to create and edit the textbook “Care of the Combat Amputee,” which is scheduled to be published early next year by the Borden Institute as part of its Textbooks on Military Medicine series.

In September 2007, the two men organized a three-day workshop, “Rehabilitation of the Combat Amputee – Consensus Conference and Creating a Road Map for the Future.” The event, held at the Center for the Intrepid at Brooke Army Medical Center, Fort Sam Houston,

Tex., brought together experts from the VA, DOD, universities and private industry to help present a consensus on standards of care issues for wounded warriors. In all, 18 leaders in key research areas lectured at the symposium. Results of the discussions were written into the textbook.

According to Cooper, a critical need existed for a textbook of this kind. “In recent years we have seen a dramatic change in the types of injuries sustained by our uniformed service members. While improved body armor protects vital organs and saves lives, an increasing number of service men and women are returning from the War on Terror with severe limb trauma. Publication of Rehabilitation of the Combat Amputee is crucial.” This volume replaces a previously published textbook that did not address information specific to the care of amputees.

Researching A Better Ride ... And More

Helping veterans live life to the fullest, in spite of amputations or polytrauma, has always been a goal of HERL. For more than 25 years, Cooper has been participating in events, such as the National Disabled Veterans Winter Sports Clinics and National Veterans

Wheelchair Games organized by the VA, Disabled American Veterans and the PVA.

Accompanied by researchers from SHRS and residents from WRAMC, Cooper analyzes data collected from the wheelchair athletes, which can be used to develop new types of wheelchairs and more advanced assistive technology.

Thanks to the efforts of Cooper and Lephart, SHRS enjoys a solid and mutually beneficial relationship with the U.S. Armed Forces. Much of the funding for programs such as the ETAP initiative at Fort Campbell, and the WRAMC symposia series is managed by TATRC – the Telemedicine and Advanced Technology Research Center. But in its quest to sustain, expand and enhance its military connections, SHRS also accepts corporate and private funding for these programs.

An amazing technical revolution in medical, surgical and rehabilitative care is no doubt a part of the future. Partnerships like those forged between SHRS and the military will go a long way to put advanced research to work for the men and women who continually and selflessly put their lives on the line, both at home and abroad.





FEEDING BODY, MIND AND SPIRIT



Take your typical Army mess hall. Add all the fast food restaurants that dot military bases across this country. Then consider the fact that two-thirds of all Americans are overweight.

How does all of this impact the performance of the American soldier? That's a question that intrigues Kim Crawford, assistant professor and coordinator of Graduate Studies in Nutrition in the Department of Sports Medicine and Nutrition.

Since 2005, Crawford and other team members from the department under the direction of Dr. Scott Lephart have been researching ways to improve safety and

enhance military readiness, first for the U.S. Army 101st Airborne Division (Air Assault) soldiers at Fort Campbell, Ky., and then for Navy Special Warfare SEAL operators from Little Creek, Va. A specialist in nutrition and exercise physiology, Crawford offers a unique component that contributes to the overall wellness of the soldier.

"They have better strength, better body composition and are healthier overall."

As part of the Elite Tactical Athlete Program (ETAP) initiative, Crawford has two primary research objectives: how to optimize performance and how to minimize injury through diet. "You don't always think about it, but nutrition plays a vital role in keeping our military men and women operating at their peak," claims Crawford. "If you adequately fuel the muscle, the muscle will perform better over a longer period of time. You will be able to delay fatigue, increase power output and maintain proper form. This, coupled with the right combination of nutrients, will optimize performance and lead to a lower rate of injury."

Education plays a primary role in the nutrition study. Non-commissioned officers are taught the basics of the nutrition program, and the information is passed down through the ranks. Helpful educational materials are also available on CD and online, so every service member can learn more about how to improve his or her eating habits.

Like the physical training aspect of the ETAP initiative, the nutrition team gathers benchmark data on individuals. They collect dietary histories and do 24-hour recalls, which record everything the service member has consumed over a 24-hour period – from soup to nuts to vitamins and supplements. To date they have input from more than 200 men and women, but the study is far from complete. Crawford, doctoral

student Katelyn Fleishman, and Matt Darnell, a graduate student, regularly analyze the data, report their findings to the military, and develop strategies for implementing positive change.

Crawford notes that their project has been embraced at all levels of the military. "We have lots of on-site support, ranging from the dietitians at Fort Campbell and Little Creek to the commanding officers on the bases. We've built relationships with these people and they trust us because we have provided immediate benefits to the service members, and that is critical to everyone involved," says Crawford.

One of the efforts that has resulted in immediate benefits is the Recovery Feeding Program for Navy SEAL operators. "We work with the base dietitians to provide actual meals to operators, complete with the food and fluids they need to address each aspect of recovery from hard physical training," she explains. According to Crawford, the meals feature high carbohydrates to fuel muscles, high protein to aid in muscle recovery, antioxidants to reduce muscle inflammation and improve the immune system, and fluids to help hydrate the soldier. Fruits and vegetables are also added to ensure a healthy, well-balanced diet.

The goal of the Recovery Feeding Program is to help the operators adapt to a higher level of performance. By properly fueling their bodies, they will recover more quickly and be ready to engage in even harder physical training. The program is not only effective in base training, but works well when an operator is deployed. Crawford notes that the feedback

from operators has been all positive. "They are grateful because we are teaching them how to eat to improve performance and health. They have better strength, better body composition and are healthier overall. They also like the fact that they feel – and look – better," she smiles.


A future study will focus on weight reduction for overweight soldiers. In spite of rigorous physical training, 58 percent of Army active duty service members are currently overweight, with a higher than average percentage of body fat. Reasons for this phenomenon vary, but high levels of stress coupled with other habits, such as smoking and alcohol consumption, lead to increased weight and unhealthy lifestyles.

Soldiers who are selected for this study will be put on a weight reduction program that is also geared to optimizing performance. Nutrients and low-fat foods will gradually be introduced into the diet so the service members will grow stronger, leaner and better prepared to complete their grueling tasks.

Crawford stresses the importance of bringing the military families into the picture. Her team uses motivational interviewing techniques and education to help families understand the physical and psychological benefits of good nutrition and to reduce barriers to lifestyle changes.

According to Crawford, "The right combination of foods and fluids contributes so much toward physical and cognitive performance. It's been a very rewarding experience to take our scientific knowledge and put it to work for the dedicated men and women in our military."



Adding Value to the Most Valued Profession

When experts speak, other experts listen. That maxim holds true especially when the Department of Communication Science and Disorders conducts its biennial "Teach the Teacher" conference.

This year's event, held June 11-13, focused on a topic that is relatively new in AuD programs. "The Art and Science of Teaching Practice Management" brought rave reviews from conference attendees. Joy Rosenberg, lecturer in Audiology and Education of the Deaf at the Mary Hare School, affiliated with Oxford Brookes University in England, called the event "inspirational and most beneficial."

Rosenberg was one of 34 attendees from 30 different AuD programs across the U.S. and Great Britain who convened to listen to presentations and exchange ideas.

"We chose practice management as our subject because, quite honestly, many faculty do not feel fully equipped to teach it," comments Dr. Catherine Palmer, associate professor, Department of Communication Science and Disorders, and the director of Audiology for UPMC.

A recent review of curricula around the country revealed that only 37 out of 65 audiology programs offer a course in practice management. This compares sharply to dentistry, where 41 out of 55 programs offer this type of course – with half offering two or three courses in practice management. "We knew that the material covered at our event would be extremely valuable to all of the AuD programs," Palmer continues.

Unlike conferences that highlight recent research findings or target clinical skills, the goal of the Audiology Teaching Conference has always been to share specific teaching techniques, philosophies and strategies. More importantly, the conference is designed to foster interaction between speakers and attendees in order to advance excellent teaching ideas.

"Educators are thrilled to have a venue where they can talk about teaching as the important topic that it is," claims Palmer. "With that said, we are pleased to have professionals from related industries and health care organizations in attendance as well."

This year, Barry Freeman, senior director of Education and Audiology at Nova Southeastern University, delivered a dynamic keynote address to kick off the two-day meeting.

Prestigious conference faculty included leading university professors, clinical practitioners and consultants in the field.

Presentations and panel discussions addressed important topics such

"Educators are thrilled to have a venue where they can talk about teaching as the important topic that it is."

as infusing practice management throughout the curriculum, course content, minimum competencies, integrating didactic and clinical coursework/experience, understanding reimbursement, understanding the law, learning objectives as a powerful teaching tool, and avoiding practice burnout – just to name a few. Planned breakout sessions allowed for various groups to further investigate topics raised at the meeting.

Paul Pessis, past president of the American Academy of Audiology, praised the Pitt team for hosting the conference. "This is an important topic for the future of our profession, and I commend you for identifying it as such. I feel the attendees greatly benefited from the format of the conference; interactive learning is always engaging."

The subject was well received among conference attendees. In a follow-up survey, comments ranged from "I learned a great deal" and "I can't wait to put it to use!" to "We need to come back in two years!" Sharon Palmer, University of Maryland, admits, "Although practice management is my least favorite topic, I actually liked the

conference as much as the other two that I attended. I learned so much!"

As part of the cost of registration, each attendee received a CD, which provided syllabi, exam questions, class assignments, homework assignments and laboratory sections from each of the speakers. Interested parties who were not able to attend the event can also purchase the CD, or access it online.

"Future topics for the Teach the Teachers conference emerge as we see a need," explains Palmer. "It's truly a collaborative effort on the part of our faculty to select the topics that they think would be most valuable to attendees."

The next conference will tackle Challenging Teaching Issues in Pediatric Audiology. It will be held June 9-11, 2011.



Behind-The-Scenes Officers Play Leading Roles In Military Health System



Think about your favorite hospital drama on TV. Doctors consult with one another over difficult diagnoses. Nurses deliver medications that ease pain. Phlebotomists draw blood. Technicians perform scans. Dozens of people pass in and out of patients' rooms, each with a specific task to make that patient's health care more complete.

But wait. Some very important characters are missing. Where are the behind-the-scenes experts who make sure that every patient's health information is accurate, protected and accessible to the right medical personnel?

The men and women in health information management may not be the glamorous stars of any prime-time drama, but they are the real heroes of every modern health care system. Nowhere is this more evident than in the military.

As one of the largest health care systems in the nation, the Department of Defense manages 9.2 billion health records for service members and their families who are constantly moving across the country and around the world. Thanks to a long-standing collaboration that began in 1989 between SHRS's Department of Health Information Management and the

Army Medical Department (AMEDD), a new generation of highly trained health information specialists now serves as leaders in their field.

Take Lieutenant Colonel Rob Curee, for example. A 1997 graduate of the HIM Masters program, Curee currently serves at Fort Gordon, Ga. As Information Management assistant chief of staff and Chief Information Officer (CIO) for the Southeast Regional Medical Command, Curee is responsible for the health information systems at the Army's equivalent of a multi-hospital health system. Among other duties, he advises the Commanding General on information technology governance,

clinical informatics, IT support and information assurance for a multi-million-dollar network.

One of 25 soldiers to receive his master's degree at Pitt through the Long-Term Health Education and Training Program, Curee believes the curriculum at HIM was "visionary." He adds, "In my opinion, the Health Information Systems program at Pitt is truly a CIO-producing program. The emphasis, not only on health care administration but also on reimbursement systems, information technology and clinical aspects of health care delivery, provided me with the well-rounded education that today's CIO needs."

Terry Foley, health information administrator, Office of the Surgeon General, and Dr. Mervat Abdelhak, chair and associate professor, Department of Health Information Management, were responsible for initiating the Pitt-AMEDD partnership, and are still pleased with the outcome. "Our graduates from the HIM program hold very responsible positions within the military," comments Foley. "They're advancing health information technology throughout the system. The program also offers candidates the opportunity to sit for certification as a Registered Health Information Administrator (RIHA), a very important credential."

Foley notes that after they receive their graduate degrees, most officers are assigned to the military's largest medical centers or deployed to Iraq and other theaters of operation, where the need for electronic medical records is paramount.

"Even though we currently operate as a 'hybrid' system with both paper and electronic records, the military is still ahead of the civilian world in this respect," says Foley. "The Army, Navy

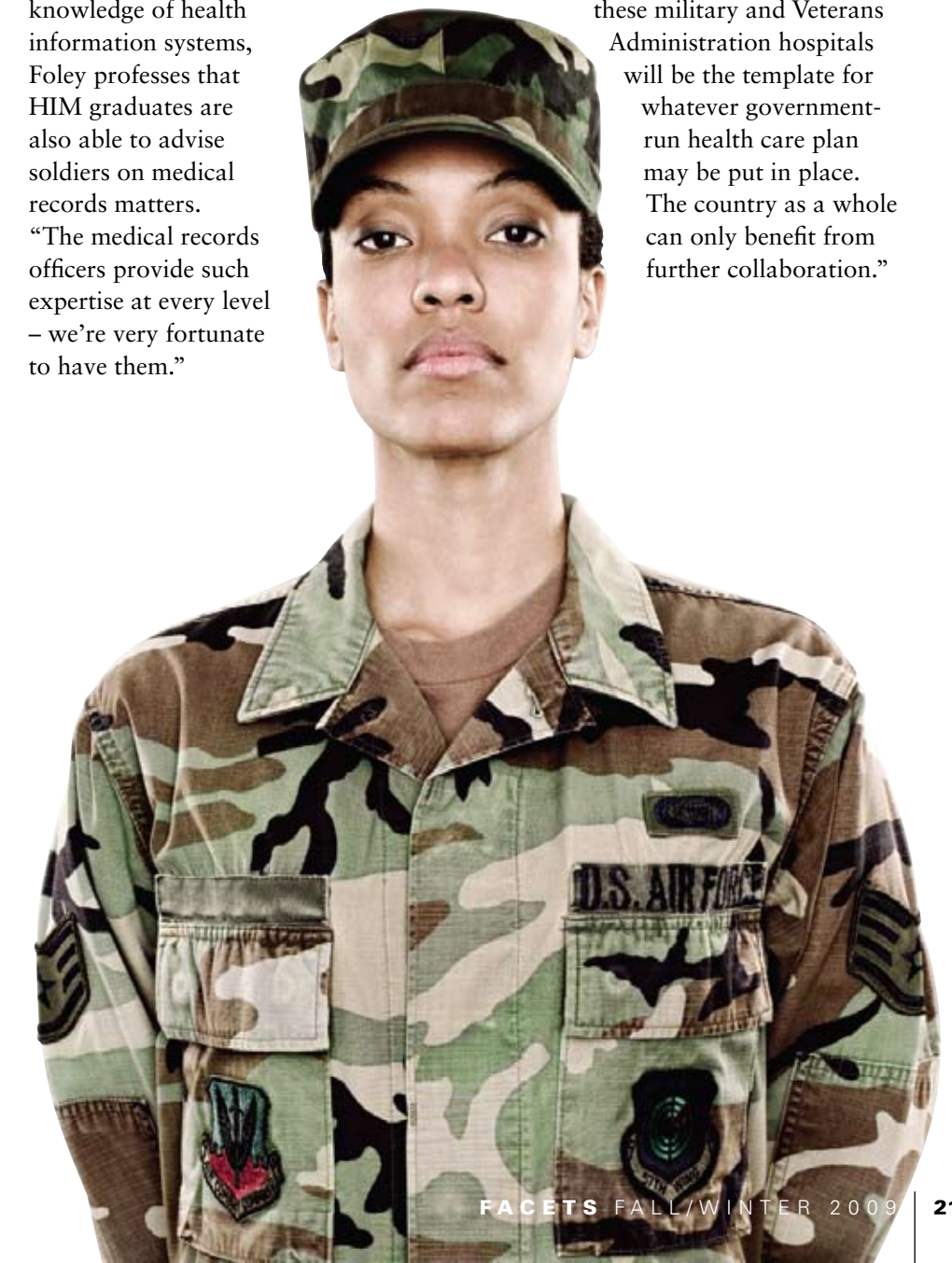
and Air Force all utilize electronic medical records to maintain both in-patient and out-patient files."

"Our graduates from the HIM program hold very responsible positions within the military. They're advancing health information technology throughout the system."

Because of their extensive knowledge of health information systems, Foley professes that HIM graduates are also able to advise soldiers on medical records matters. "The medical records officers provide such expertise at every level – we're very fortunate to have them."

Abdelhak believes the partnership has benefits for both parties. The AMEDD officers in the HIM program get a firm foundation in health care administration, clinical informatics and related information technology – as well as valuable insight into the civilian health sector. The University, on the other hand, earns bragging rights for educating some of the brightest stars in the field of health information management today.

According to Curee, "The Pitt Health Information Systems concentration has already had a significant impact on how HIM is practiced at military hospitals and the Army Office of The Surgeon General. It is quite likely that these military and Veterans Administration hospitals will be the template for whatever government-run health care plan may be put in place. The country as a whole can only benefit from further collaboration."





A Step In The Right Direction

*New Prosthetics & Orthotics Major
Designed To Meet A Growing Need*

The scholar Pliny recounts a tale of a Roman general with an amputated arm who fought in the Second Punic War using an iron hand fashioned to hold his shield.

Herodotus tells a similar story about a Persian seer who escaped captivity by amputating his own foot and carving a wooden filler that enabled him to walk 30 miles to safety.

Uses of many prosthetic devices have been documented throughout history, but dramatic advances in the field have been few and far between. That is, until present time. The last half of the twentieth century brought about innovative technology and a growing need precipitated tremendous change.

This fall, the School welcomed its first class of students in its new Master of

Science in Prosthetics and Orthotics (MSPO) program, and marked a new era of promise. The MSPO program is the only one of its kind in the surrounding area, and will prepare students for careers in a growing field.

According to the U.S. Department of Education, a deficit of prosthetic and orthotic practitioners exists. Pitt is now only the tenth school in the country to train P&O professionals. A recent study shows the demand for provider services is expected to increase by 25 percent for orthotic care and 47 percent for prosthetic care by 2020. Experts predict that without an increase in the number of P&O graduates, approximately 61 percent of the population using orthoses, and only 66 percent of prosthetic consumers will be served.

WHY THE GROWING NEED?

America is aging, and with age comes a variety of physical limitations. Older Americans typically use a higher number of health care services than their younger counterparts, but this generation of seniors is also more physically active than ever before. Innovative orthotics and prosthetics will allow them to participate in many of the activities they enjoy, without compromising their lifestyle.

Furthermore, two widespread health problems are putting a strain on the need for trained P&O professionals. According to the Department of Health and Human Services, diabetes and obesity are reaching epidemic levels, with the number of Americans diagnosed with diabetes projected to reach 29 million by 2050.

Diabetes is the leading cause of limb loss, followed by cardiovascular disease.

With 66 percent of the population classified as overweight, and 32 percent as obese, the National Center for Health Statistics, an arm of the Centers for Disease Control and Prevention, predicts a growing number of Americans will eventually require hip or knee replacement, disk surgery or orthotics to help them maintain their quality of life. Complications from obesity will surely drive the need for more extensive orthotic services, while the increase in diabetes will create a need for both orthoses and prostheses. The 43 million adults suffering from arthritis may also turn to orthotic devices to stabilize joints, reduce pain and improve function.

WHAT WILL THE PITT PROGRAM INCLUDE?

The new MSPO is five consecutive terms in length, including one summer term, for a total of 67 credits. As with most programs in SHRS, it requires a clinical internship for students to acquire hands-on experience in the field. Coursework is designed to meet all standards for accreditation by the National Commission on Orthotic and Prosthetic Education (NCOPE) and to prepare students to take the American Board of Certification in Orthotics, Prosthetics and Pedorthics examinations.

Dr. Ray Burdett, associate professor and director of the MSPO program, notes that NCOPE is moving toward graduate-level training. "By 2012, all P&O education will be at the graduate level, and students starting their education at that time will need a master's degree to enter the field. Our program will provide the comprehensive education and training students will need to secure a residency and obtain their certification."

Students in the MSPO Program will learn the importance of working as part of an integrated health care team along with physicians, therapists and other caregivers. Classroom hours will be spent on clinical sciences related to orthotics and prosthetics,



patient assessment and treatment plan development, as well as fabrication, fitting and modification of orthotic and prosthetic devices. The first term will be primarily didactic, but starting with their second semester of study, students will work in a newly constructed lab at Bakery Square in East Liberty, three miles from campus. The lab will be fully equipped for the fabrication of prosthetic and orthotic devices utilizing state-of-the-art materials and technology. Since this is a rapidly changing field, students will learn to locate and use research results and other evidence in their clinical practices. Throughout the program, the future clinicians will gain an understanding of their role in providing continuing patient care and evaluation. They will also gain insight into business and organizational management skills and best practices.

Because this major is so closely aligned with SHRS's existing programs, including Physical Therapy,

Occupational Therapy and Rehabilitation Science and Technology, as well as Pitt's highly-regarded School of Medicine, the MSPO program adds to the University's complement of health professions.

According to Burdett, the new major also opens up opportunities for valuable research. "Orthotics and prosthetics attract a mix of students with backgrounds in engineering and the biological sciences. They have the kind of inquisitive minds that are needed to take this field into the future. We're seeing a lot of research being done here and abroad in the areas of osteointegration for prosthetics, exoskeletal orthoses, and direct mind control of prosthetic devices. Scientists are using robotics – they're placing microprocessors in knees to control knee joints and are trying to replace muscles with power mechanisms. The possibility

of limb transplantation or regeneration may alter the profession radically. It's very exciting, and we're happy to be a part of it."

Approximately 15 students have been accepted into the first class. They come from diverse undergraduate backgrounds, including the fields of bioengineering, athletic training, exercise science, psychology and rehabilitation sciences.

Among the new students is Nathan Sprunger, a former sergeant in the Marine Corps who served two tours of duty in Iraq. Sprunger holds an undergraduate degree in Rehabilitation Science from SHRS, and became interested in the field of prosthetics while working at Walter Reed Army Medical Center. "I have several friends who are amputees because of the war. After graduation, I would like to work with the VA health care system to help returning vets who received traumatic wounds in combat get the best possible care."



Lieutenant Commander Sean Easley (t-DPT '05)
Naval Hospital
Camp Lejeune, N.C.

“I have been in the Navy since 1998, and served in the Army as a PT from 1993-1997. I was stationed in Washington, D.C., Fort Irwin and San Diego, Calif., and Yokosuka, Japan, before my current assignment at Camp Lejeune.

Immediately after school, I was assigned to Japan where, surprisingly, I spent about 80 percent of my time performing school-based and early intervention therapy with children! This wasn't what I thought I'd be doing, but I found a hidden opportunity in the assignment. I opened a new outpatient practice part-time in a small military clinic near my pediatric job to bring outpatient PT to a military community that previously didn't have it. It was very satisfying.

Today, the Marines returning from deployments wind up in my clinic with a huge variety of so-called 'minor' injuries that they have been forced to endure for weeks or months. I think I would have struggled to get these young people back on the road to recovery before I received advanced training at Pitt. Now I am better prepared to educate my patients on evidence-based interventions that will give them the best chance at recovering from or managing their injuries long-term.

As a department head, I supervise eight PTs and 15 PTAs who work with the same wounded warriors. The time spent in my graduate studies, as well as my position teaching an entry-level PT program, gave me more confidence and a better handle on educating my staff on the best methods to rehabilitate our patients. When I 'grow up' – i.e. retire from the military – I hope to teach. With any luck, it will be at the SHRS program at Pitt!”

Major Edward A. Goodnite (DPT '05)
Physical Therapy Element Chief
Keesler AFB, Miss.

“As an Air Force PT, I have many opportunities that my civilian counterparts do not. Working as a physician extender in a collaborative team effort, I can see patients without the need of a referral and can independently order imaging, lab work or medications I feel the patient needs in order to properly diagnose and treat the patient.

The teamwork of the military has been a pleasure to experience. All specialties come together with mutual respect and work very effectively together in getting patients well and back to duty.

My Pitt education and training directly impacted my colleagues in the armed services. Upon graduation I immediately put my skills to use when I was deployed to the Middle East. I was the musculoskeletal expert on site, serving more than 9,000 base personnel, and treating more than 200 wounded warriors. My Pitt skills helped me achieve a 96 percent return-to-duty rate for those soldiers wounded in combat.

I continue to build on the solid foundation I received at Pitt, serving as director of physical therapy services for an Air Force base population of more than 30,000 people.”

PHYSICAL THERAPY ALUMNI Reporting For Duty

Over the years, the Department of Physical Therapy has trained a number of scholars who have attained leadership roles in different branches of the military. We caught up with four of our distinguished alumni and invited them to share their professional accomplishments and explain how their training at Pitt has impacted their lives.

Major John Childs (PhD '03)
Associate Professor and Director of Research
US Army-Baylor University Doctoral Program in
Physical Therapy
Army Medical Department Center and School
Fort Sam Houston, Tex.

“There are more similarities than differences between treating members of the military compared with civilians. However, because we see a younger and highly active population, the percentage of patients with non-traumatic musculoskeletal injuries is very high. Also, in the large military medical centers, there is also the need for a high level of care for wounded soldiers.

Without a PhD, I would not have been able to pursue a career focused around a musculoskeletal research agenda that is funded by professional and federal agencies, such as the NIH and Department of Defense. Musculoskeletal injuries are one of the most common reasons for missed duty in the military and consume enormous costs, so identifying evidence-based management strategies for these conditions is a high priority to improve function, quality of life and also to reduce associated disability and costs.

It is very gratifying when you see research that you have played a role in being used in the decision-making process to improve outcomes for soldiers. Although conducting research is intellectually stimulating and challenges the status quo in its own right, the real satisfaction lies in seeing the impact on the lives of those who selflessly serve our country.”

Ret. Lieutenant Colonel Rob Wainner (PhD '00)
Founding Partner, Texas Physical Therapy
Specialists and Evidence in Motion
Associate Professor, Texas State University,
San Marcos, Tex.

“I spent a total of 20 years in the Air Force, and worked in a variety of positions including staff physical therapist, clinic director, clinical education coordinator, specialty service provider (EMG/NCV testing) and research director. I also served two tours as a faculty member in the U.S. Army-Baylor Doctoral Program in Physical Therapy.

I was one of the first military PTs to go through Pitt's PhD program. My training at SHRS opened up a whole new world of opportunities in the area of teaching, research and professional influence that would have otherwise not been available to me. I like to think that I helped influence other military students to follow me in this program. My training also helped me significantly influence the orthopaedic instruction as well as direction of research efforts at the U.S. Army-Baylor Doctoral Program in Physical Therapy and the research lines of inquiry in the U.S. Army Fellowship in Orthopaedic Manual Physical Therapy, and helped initiate the early physical therapy lines of inquiry into Clinical Prediction Rule research.

My greatest satisfaction regarding my contribution to serving our fighting men and women in the uniformed services is knowing that the majority of students I trained have either been deployed to hostile theaters, or serve in positions where they are treating those returning from such locations. Although I never deployed during my time in the military, I feel I have positively impacted the military mission and those executing it by equipping and preparing my students to be critical thinkers, and to have exceptional manual therapy skills. I believe this has allowed my students to provide our men and women in uniform with the best evidence-based physical therapy care possible.”



Serving on the front lines

A History of Occupational Therapy in Wartime

The occupational therapist today is welcomed as part of a comprehensive health care team – an important caregiver who helps to return the patient to functional living after injury, illness or the aging process. According to Dr. Jeffrey Reznick, medical historian and adjunct faculty in the Department of Occupational Therapy, we sometimes forget that occupational therapists have served on the front line of care for our service members from as far back as World War I.

Their legacy of skilled and compassionate care points to their ability to understand the unique rehabilitation process that disabled service men and women must endure.

During World War I, occupational therapists – then known as reconstruction aides – worked collaboratively with physicians and physical therapists –

then called physiotherapy aides – to rehabilitate wounded soldiers with a variety of physical and psychological conditions. Their first assignment was at U.S. Base Hospital 117 in Lafauche, France, where the aides worked with “acute psychiatric casualties.”

According to the official history of the U.S. Army Medical Department in World War I, published by the Surgeon General of the U.S. Army Surgeon General, Base Hospital 117 successfully returned 50 percent of patients with “war neuroses” back to combat and 40 percent to other military duty. This success motivated General John J. Pershing to request that 10 reconstruction aides be assigned to each overseas base hospital. By March 1919, 187 aides were serving abroad and over the duration of the Great War, 2,000 aides served in uniform at home and overseas to help rehabilitate wounded soldiers.

During World War II, occupational therapists played a role in Army hospitals across the U.S., especially at the seven Armed Service Amputation Centers. Therapists guided wounded soldiers in a variety of arts, skills and hobbies during their recuperation from neuropsychiatric injuries, sensory and motor disturbances, neurological trauma, hand injuries or amputations. At the flagship center located on Mare Island, California, over 2,500 amputees were treated and rehabilitated with a reported 90 percent success rate, due in large part to the role of occupational therapy at that institution. By August 1945, nearly 900 occupational therapists and trainees were working in more than 75 Army hospitals nationwide.

Occupational therapy rose to new heights in the years during and after the Korean War. Occupational therapists served alongside physical therapists and

dietitians as members of the Women’s Medical Specialist Corps, which was formally established in 1947 to serve soldiers wounded in combat. OTs were frequently found in psychiatric departments, where they assisted soldiers with trauma, and in burn units, where they helped those with disabilities regain and maintain as much motion as possible in order to undertake activities of daily living.

Lieutenant Colonel Charles D. Shields offered what was perhaps the most significant testimony of the value of occupational therapy. Shortly after the war, he stated that in relationship to recent advances in medicine and surgery, “we now believe that occupational therapy as a medical subspecialty is most effective in treating patients with physical disabilities, psychiatric disorders and tuberculosis, with functional improvement as the goal of therapy.”

From left to right: 1. Reconstruction aides organize a class in occupational therapy at U.S. Base Hospital No. 9 in Châteauroux, France during World War I. 2. OT helps patient strengthen hand muscles and develop dexterity, ca. 1945-1950. 3. Occupational therapy staff of Brooke Army Hospital, ca. 1945. 4. Soldiers fitted with prostheses participate in occupational therapy at England General Hospital, Atlantic City, 1946. Images 1 and 2 courtesy of the National Library of Medicine. Images 3 and 4 from the Archives of the American Occupational Therapy Association, held by the Wilma L. West Library of the American Occupational Therapy Foundation.

By 1955, reflecting the fact that male OTs had joined its ranks, the organization officially changed its name to the Army Medical Specialist Corps. The casualties of the Vietnam War precipitated the opening of occupational therapy programs at military hospitals located in Japan and Hawaii, as well as in the continental U.S.

Occupational therapy rose to new heights in the years during and after the Korean War.

During this period, OTs made substantial contributions to the multidisciplinary rehabilitation care of wounded soldiers with lower-extremity amputations. With advances in surgical techniques and hand

surgery, therapists were also able to assist with upper-extremity neuromuscular skeletal evaluation and treatment. They treated those who suffered the symptoms of trauma, including depression, anxiety and hostility, and provided assistance to soldiers facing the effects of malaria or hepatitis.

The Persian Gulf War (1990-91) marked the first time occupational therapists in the Army Medical Specialist Corps were mobilized as active personnel deployed overseas. The direct engagement on the war front enabled therapists to work more closely than ever before in an interdisciplinary team to help prevent and resolve combat stress casualties. Serving on the front line of battle, they were able to develop rehabilitation programs for soldiers experiencing orthopaedic trauma and thermal injuries.

In the Army’s 528th Medical Detachment (Psychiatric), an interdisciplinary mental



OT Assistant student works with wounded warrior in the Physical Medicine Clinic at Tripler Army Medical Center in Hawaii. Photo by Mindy Anderson, Tripler Army Medical Center Public Affairs, courtesy of U.S. Army.

health team deployed to Saudi Arabia, occupational therapists worked side-by-side with other professionals in the fields of psychiatry, psychology, social work and other key scientific and social disciplines. Together, they developed a combat stress casualty treatment program which emphasized return to duty, identification of problems within the soldier's control, and use of coping mechanisms – all encompassed under the umbrella of the activities of daily living (ADL). Of the 87 soldiers enrolled in the 528th Medical Detachment's program during its lifespan of three months, all but eight were successfully returned to duty.

In more recent history, occupational therapists have continued to play a vital role in the rehabilitation of injured service members. From instruction related to ADL to hand therapy to ergonomics to mental health, they consistently strive to assist soldiers in maintaining their highest level of performance and fitness for combat duty.

Reznick reminds us that therapists play an important role in related programs for military spouses, children and other dependents – as well as veterans with and without disabilities – to help ensure health, well being and participation in civilian life. "Occupational therapists are making major contributions in 35 Warrior Transition Units (WTUs) across the country," he reports. "In each



Army Sgt. Dennis Cline constructs a model with his prosthetic hand as part of his OT regimen at Walter Reed Army Medical Center. Photo by Fred W. Baker III, courtesy of U.S. Army.

location, therapists develop strategies that assure the soldier's successful return to productive living, whether as a warrior serving the nation at war or as a veteran serving the community at home."

Reznick also notes that this is only the latest chapter in the legacy of military occupational therapy, and it is one rooted as much in history as in contemporary rehabilitation science and successful professional collaboration. As long as wars are waged, and as long as soldiers return home with wounds of the mind and the body, occupational therapists – and the unique body of knowledge that constitutes this profession – will be ready to serve.

Historical perspective by Jeffrey S. Reznick, adjunct associate professor, Department of Occupational Therapy and director of the Institute for the Study of Occupation and Health of the American Occupational Therapy Foundation. He is also author of John Galsworthy and Disabled Soldiers of the Great War.



From EMT To Military Physician

When Matthew Carr started his undergraduate program at Pitt, he was like most new college students. He had a concept of what he wanted to do – become an aviator. But he had yet to find his passion.

Carr enrolled in the Navy ROTC program as a Marine Corps midshipman, and heard about a course in Emergency Medical Technician training. It seemed like a good idea for someone in his career path, and one thing led to another. Soon Carr discovered that SHRS offered an entire major dedicated to Emergency Medicine. "At the time, I was only going through the motions and giving minimal effort to my major, which was history," explains Carr. "I thought this would be a great chance to learn something that truly interested me. Becoming a paramedic really introduced me to the medical world, and started to open my eyes to a career as a medical officer in the military."

"The emergency medicine curriculum at Pitt has given me an excellent background."

Today, an Ensign in the U.S. Navy and a first-year medical student at the Uniformed Services University in Bethesda, Md., Carr remembers several turning points in his education that led to his decision.

During his junior year, Carr's fieldwork included working in ambulances that covered the Oakland area. "I remember

responding to a call in a dorm where my friends lived," Carr says. "Even though I had been in that building days before as a student, I was now walking through it as an emergency responder. It was very rewarding to be providing care in an area that had become my home," he continues. "The experience allowed me to look at what I do from a totally different point of view."

But it was during Carr's senior year clinical rotations that he began to really see his future in emergency medicine. "I was riding in a medevac helicopter and, to me, that was just about the greatest thing out there," recalls Carr. "For years I had watched the helicopters fly over Lothrop Hall and land on Presby. To be actually flying with one of those crews ... it just seemed surreal. I knew this is where I wanted to be."

Although his father is a military physician, it never occurred to Carr to follow in his footsteps until he was close to graduation. Now he believes that, as a military doctor, he will have many opportunities that will allow him to grow, both personally and professionally.

According to Carr, military medicine offers the unique experience of being involved in worldwide health care. Many times, deployed physicians are faced with rare illnesses that their civilian colleagues will rarely, if ever, encounter. Carr also relishes the opportunity to participate in humanitarian aid efforts at some time in his career.

Right now, he is intensely involved in medical school. He believes his training in the Emergency Medicine program,

coupled with his experience as a working paramedic has changed his attitude about studying.

"The emergency medicine curriculum at Pitt has given me an excellent background," claims Carr. "During my early undergraduate years, it was easy to study a subject 'just for the exam,' and immediately forget everything I had just crammed into my head. But once I became a paramedic, I quickly became aware that what I was studying would actually come into play in the field.

As a med student, I can see that cramming, while helpful for an exam, does not give you the long-term knowledge you need to be a successful physician. I need to study to really know the information – not just for an exam but for the patients I'll be treating."

While all physicians are dedicated to their profession, Carr notes that military doctors have even more reasons to strive for excellence. "Our patients will not be our customers. They will be fellow soldiers, sailors, Marines and airmen, and their families," notes Carr. "We get the chance to work with some of the best people in our generation, as well as the generations before ours. We're part of a team, and we're here to learn so that we can contribute to that team."

Carr feels fortunate to have had strong training to prepare him for his role in the military and looks forward to building upon this training during his career as a medical officer.



The Real World

Jordan Ketch has always been interested in health care. But unlike some kids, he wasn't obsessed with stethoscopes or experiments in the laboratory. Instead, Ketch turned to the business side of medicine. If that sounds surprising, consider his mother. Rebecca Harmon, aka "Mom," is assistant professor in the Department of Health Information Management. She is also her son's inspiration and mentor.

"I was only eight years old when my mother started in the HIM program at Pitt," recalls Ketch. "I watched our family situation turn around dramatically when she graduated, and along the way, she gave me a lot of insight into what a career in HIM might be like."

During his sophomore year in college, Ketch made the decision to major in Health Information Management. Yes, he has been a student in his mother's class – not once, but twice. "I do feel additional pressures to perform well," he admits. "Not just in her classes, but throughout all aspects of the HIM program, whether academic or extracurricular."

"Jordan is a hard worker, and takes nothing for granted," comments Harmon. "I was certainly hard on him because I knew what he was capable of. I think HIM, and health care in general, need people like Jordan who are willing to put their heads down and just do the work that needs to be done, regardless of the naysayers. This is especially crucial in leadership positions, which is where Jordan is headed," she adds.

While many HIM seniors seek internships at hospitals and other health care institutions, Ketch, again, took another route. He applied to do an

independent study at the Pittsburgh law firm of Goldberg, Persky and White, P.C. before doing a formal internship. His project director at the firm helped him



focus on his skill set, and gave him an assignment that will use his talents as well as help the company. This semester, Ketch is expanding a reference manual that is used for case investigation. "Specifically, I'm looking at how health care records are obtained, used and stored when they're needed for medical claims," he explains.

The manual, which Ketch will turn in as his senior project, will include details

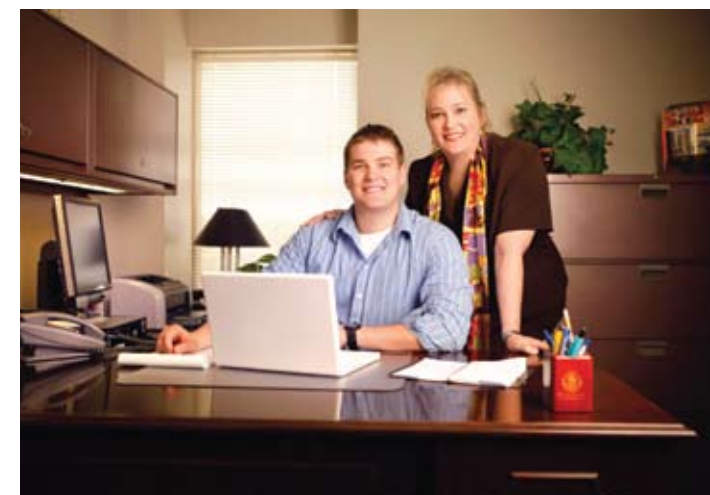
about HIPAA regulations and how records can be disbursed to the defense or prosecution in a case. Ketch says he's still in the early stages of the project, but expects to add approximately 40 pages to the current company manual.

Right now, Ketch is particularly interested in risk management. He's not exactly sure what his career path will be, but hopes to attend law school one day soon.

According to Harmon, this is a particularly rewarding time to be in the field of HIM. "We increasingly see HIM graduates being sought out by non-traditional HIM employers,

which means that the value of an HIM education has broad applicability and appeal across multiple sectors, both inside and outside of health care."

There's no doubt that the knowledge Ketch has acquired in the Pitt program and during his independent study at Goldberg, Persky and White will serve him well in the future.



"We increasingly see HIM graduates being sought out by non-traditional HIM employers, which means that the value of an HIM education has broad applicability and appeal across multiple sectors, both inside and outside of health care."

SHRS Donors 2009

Thanks to all our alumni, faculty, staff and friends for their generous support of the School of Health and Rehabilitation Sciences during fiscal year 2009. Their contributions enabled us to grow the SHRS Alumni Endowed Scholarship Fund, establish other endowed scholarship and student resource funds, provide student awards based on need and academic merit and provide program support, graduate research assistance and services to the community.

Corporations, Foundations and Organizations

3M Foundation, Incorporated

American Academy of Audiology, Inc.

American College of Rheumatology Research

Arrow Electronics

Arthritis Foundation

AstraZeneca Pharmaceuticals LP

Audio Technology Specialists, LLC

BAE Systems

Cigna Corporation

The Denver Center for the Performing Arts

Etymotic Research, Inc.

ExxonMobil Foundation

FISA Foundation

Keystone Paralyzed Veterans of America

Paralyzed Veterans of America

Prentke Romich Company

The Prudential Foundation

Remed Recovery Care Centers LLC

Starkey Laboratories, Inc.

United Way of Allegheny County

University of Pittsburgh Medical Center

Volunteers of America of Pennsylvania, Inc.

Widex Hearing Aid Co., Inc.

John Patrick Abt
Sondra A. Balouris & Cliff Brubaker

Mary Jo Geyer & Ray Burdett

George Edward Carvell

Christine Chase

John David Childs

Rosemarie & Rory A. Cooper

Ronna Sue & Anthony Delitto

Judith Lomakin Dodd

Denise Ann Dunyak

Julie Mae Fritz

Rebecca J. & Steven Zachary George

Kristin Klingensmith Henson & James Barton Henson

Gregory Evan Hicks

Michael Scott LaFrankie

Susan Pressly Lephart & Scott M. Lephart

Jacqueline Weis Liebergott

Anna M. & Thomas Edward Platt

Timothy C. Sell

Robert Steven Wainner

Gregory C. Young
Jean & R. Lee Young

Cheryl Mickey Ferris
John Charles Fisher
Lynn Mary & G. Kelley Fitzgerald

Denise Vekasy Fortson

Karen-Leigh Frost

Wendy Winter Gebb

Alice Springer Gibson & Karl Robert Gibson

Michelle Suzanne Bourgeois & Howard Goldstein

Marc Goldstein

David G. Greathouse

Carol & Harry L. Green

Max J. Green

Stephanie Constance & Guy Eric Guimond

Lynn Hudson Hale & Wayne Andrew Hale

Constance Chase Havrilla & Kenneth J. Havrilla

Sharon K. Headley

Andrea L. Hergenroeder

Mary Ann Hosak

Francine Hovanec

John Isaac Jr.

Gail M. Jensen

Ardelle Elaine Johnson

Nancy L. & Norman L. Johnson

Joan Herman Kahn

Revati D. Kapur

Patricia E. Karg

Margaret Mary Keltz

Susan Ruth Klein

Kathleen Komisin Knapp

Janet D. Knepfer

Emily Korn

Patricia Kummick

James Thomas Kwiatkowski

William M. Lake

Patricia Stump Larson & Christopher Elliot Larson

Patrick T. Mangus
Edwin W. Martin Jr.
Palmira Mascaro Martin
Sara Nordyke Masilko
Cynthia Ann Maziarz
Kathryn Porter McBeath
Brett Decker McCormick
Thomas D. McCracken
David Lindsey McKinnis
Cynthia Miles
Beth Ann Mineo
Wanda Virtue Molchen

Joseph Matthew Wozneak
Kathleen McClain Zack
Kathryn Haffner Zavadak & Daniel G. Zavadak
Mildred Zinberg

Individuals \$50 - \$99

Anonymous
Nancy E. Baker

Allen Wayne Barbaro

Helen S. & Brooks M. Bartlett

Sherri Beck

Amy Louise Beeler

Anthony John Bianco

Raymond L. Blakely

KathyYurchak Blazer

Nancy J. Bloom

William G. Boissonnault

Christine Elizabeth Heard Bonacci & Ronald Philip Bonacci Jr.

Steven Kenneth Bowers

Doris P. Bradley

Jill Brehm

Mary Ellen Buning

Stephen Patrick Burke

Robert J. Burns

Michele Wester Buzard & Gregory Scott Buzard

Karen Bauer Lilly

Scott E. Campbell

Richard Jeffrey Caplan*

Maria A. Carchilla

Rochelle S. & Robert S. Chabon

Ann Hay Cober

Christine Vesely Coleman

Mindy L. Columbus

Margaret Wilson Conard

Ann Juanita Covington

James L. Coyle

Lynn Karaffa Cremen

Gretchen Barone Donahoe

Jennifer Linnea Doster

Joseph Mark Dougherty

Courtney L. & John J. Dube

Michelle Mary Ferketic & John Eberhard

Charles E. Ellison

Diana Dewey Emanuele

Jane Henderson Eversole & Ronald Eversole

Robin Leigh Gries Grimenstein
Colleen D. Hamm
Rachel Miller Harken & Dwight Harken
Betty M. & Todd Charles Henkelmann
Merry Ann Hildebrand
Gail Zickler Hnatiow

Marcia L. & Eugene V. Patterson
Lee Ann Pickering
Brenda Marie Punako
Marirose A. Radelet
Ketki Dhruv Raina
Pamela Ernst Reynolds
Tamara B. & Thomas B. Ribar
Suzanne Burdick Roberson
Melissa A. Rocker
Marilyn Rothstein
Francis J. Ruefle Jr.
Dorothy M. Ruttle-Neill
Vivian M. & Jan M. Savit
Christie Sue Savor
David A. Scalzitti
Karen Wyn Kaslon Schlam
Kathleen Schlough
Valerie K. Schreiber
Christine Ann Schroeder
Linda R. Scislowicz
Rocco Sgarro
Cynthia C. & Karl John Sheaffer
Amy Myers Sheehan
Clyde Gregory Smith
Mary Jo Smith
Arlene Robin Spiegelman
Krista Marie Stauffer
Judith Audrey Stitley
Jody Schank Strauss
Daniel Edwin Unrath
Kevin Edward Urbansky
Mark Daniel Van Volkenburg
Peggy Vennie
John Vicchio
Lynetta Ann Walker
Marjorie Jane Weigel
N. Jill Davies Wenstrom
Roberta I. White-Prentice
Mary S. Wilczynski
Deborah Menk Wilson
Katherine A. Winters
Audrey E. Rudolph Yanco
Fan Zhou & Xiaoming Zeng
Annette Hochrein Zigrassi
Peter Simon Zulia

Change Service Requested



I got rhythm, I got music...

...and I got a great feeling when I made a gift to SHRS. Whether it's an annual gift, a pledge to be paid over time, or a planned gift to be completed at some point in the future, your donation to the School of Health and Rehabilitation Sciences will ensure that our proud tradition of educating talented and caring therapists, clinicians, and researchers continues. So dance the night away, but don't let another day go by without putting your best foot forward with a gift to SHRS.

For more information, contact Patty Kummick, director of development, at 412-383-6548 or pkummick@pitt.edu.

You can ...

- support SHRS in general, or direct your contribution to a specific program or fund
 - establish a current-use or endowed fund
 - enjoy certain tax benefits
 - leave a lasting personal legacy
- ... all through a gift to the University of Pittsburgh.



University of Pittsburgh
School of Health and Rehabilitation Sciences

www.giveto.pitt.edu