

PENN STATE MEDICINE

TRANSitions



EDUCATION
RESEARCH
PATIENT CARE

PENNSTATE



Milton S. Hershey Medical Center
College of Medicine

FIRST NOTE



Darrell G. Kirch, M.D.

"In this issue of Penn State Medicine, you will read about the tremendous leadership, ingenuity, and compassion of our students. I hope that each of you finds it strengthens your own sense of resolve and duty to community."

Transitions... at Penn State College of Medicine the most obvious occurs each May during Commencement. This year, 103 medical students and 26 graduate students took the next great step in their careers as health professionals. I am certain that each will make significant contributions to the health of their communities and to medicine and science in general.

The gifted young women and men who earned their degrees this spring have witnessed a great deal of transition—not the least of which was a compelling shift in the world's consciousness following the events of September 11th. My belief is that the tragedies, which occurred not-so-far from our own campus, caused many to become more focused on the cause of serving others. This principle always has been at the heart of medicine as a profession—but somehow now seems even more important to all of us who are committed to preserving, protecting, and enhancing the health of others.

The past year has given us many reasons to celebrate. Not only did we graduate a distinguished group of students, the College also earned distinction from the Liaison Committee on Medical Education (LCME). Following its site visit in February, the LCME gave the College of Medicine its full accreditation and extremely high marks. Out of 210 standards, only 3 areas were deemed to be less than fully compliant. The LCME results are a credit to our world class faculty educators and academic leadership. We not only scored well with regard to the standards. The LCME also was very impressed by the level of synergy they felt existed between the College and the Medical Center.

As our academic programs continued to prosper, our research endeavors enjoyed significant growth. Since July 2000, research funding has increased by more than 52 percent—from \$54.5 million to more than \$83 million this year.

On the clinical side, we had more than 594,000 outpatient clinic visits in 2001-02—4.8% above the prior year. Nearly 37,000 people came through our emergency department—an increase of nearly 9%. There were more than 16,000 operating room cases—up by 2.75%, and hospital admissions remain steady.

Our dramatic growth, combined with our desire to better serve our community, enhance operational efficiency, and improve service to our patients, has led us to begin a master facilities planning process. We are reviewing the efficiency of our existing campus infrastructure and determining what physical expansion and renovations will be needed to support the continued, focused growth of the Medical Center and College. Our priorities include the expansion of research and academic facilities, as well as outpatient surgical and clinical services. Improved facilities for our Penn State Children's Hospital and Penn State Cancer Institute are also high priority projects.

The Medical Center and College of Medicine are embarking on a significant period to be marked by new approaches, fresh initiatives, and responsible growth. Through it all, our dedication to our three important missions of health education, research, and patient care will only be strengthened.

In May, we received the results of our latest employee satisfaction survey. With great pride, I learned that positive morale among our employees is up 18%—from 44% just 16 months ago to 62%. I believe the hardworking and dedicated women and men of the Medical Center and College of Medicine are committed to our mission, our vision and feel a renewed sense of purpose and optimism.

With great excitement and enthusiasm, I look forward to working with all our dedicated faculty, employees, students, alumni, Penn State University, and our local community to build upon the strong foundation of service that exists within the Medical Center and College. Working together, I believe truly great things are possible. We will continue to set the bar high and work cooperatively and vigorously to achieve our goals. ■

A handwritten signature in dark ink that reads "Darrell G. Kirch". The signature is fluid and cursive, with the first name being the most prominent.

Darrell G. Kirch, M.D.

Senior Vice President for Health Affairs, Dean, Penn State College of Medicine,
Chief Executive Officer, Penn State Milton S. Hershey Medical Center

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ON THE COVER

Finding the right path in a
time of change and opportunity.

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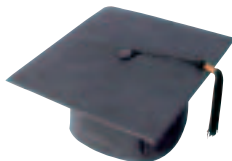
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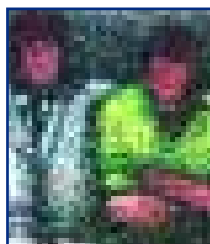
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THE CHALLENGE OF Nursing

by Alison Delsite
photos by John Biondo

In recent years, much has been written about the national nursing shortage, job dissatisfaction caused by managed care, and the medical community's response to both issues. But amid these controversies, an important message has been lost: The nursing profession has never offered more opportunities and hence, more rewards.

"There has never been a better time to be a nurse," says Donna Reck, chief nursing officer at Penn State Milton S. Hershey Medical Center. "The opportunities are endless."

While the majority of nurses still provide patient care in the nation's 5,200 hospitals, changes in the health care industry have expanded the settings in which nurses can provide care, including outpatient rehabilitation, home and hospice, same-day surgery centers and sub-acute facilities.

"That's one of the wonderful aspects of nursing. You can start out in one area of nursing and later change to another," Reck says.

And at academic medical centers, like Penn State Hershey Medical Center, nurses also play a key role in education and research.

"We have nurses working to meet all three of our hospital's missions: patient care, education and research," Reck said. "No longer do nurses have to remain at the bedside... They can still provide exceptional patient care in other roles, such as case coordinators, managers, educators and scientists. The opportunities, the challenges and the rewards are immeasurable."

THE CHANGING LANDSCAPE

According to the U.S. Department of Health and Human Services, growth in the nursing workforce has not kept pace with the country's population growth over the last four years. The latest numbers from the American Association of Colleges of Nursing indicate that enrollments in five-year nursing schools dropped 16.6 percent from 1996 to 2000. Within 10 years, roughly 40 percent of working registered nurses will be 50 or older.

Our nation has undergone nursing shortages in the past, of course. But experts say this shortage is more critical because nursing has lost some of its luster as a career opportunity.

Historically, nursing was a female profession. Today, women have many career opportunities and those who want to work in medicine often opt for the higher-profile or better-paying positions, like physicians. What's more, experts say the managed care environment has caused nurses nationally to become frustrated with their working conditions.



In response, nursing schools are recruiting men and minorities. Hospitals are offering sign-on bonuses, flexible schedules and higher salaries. Earlier this year, Johnson and Johnson even launched a \$20 million campaign designed to lure people to the profession.

While the medical center does work with high schools and colleges to encourage young people to enter the profession, the focus really is on retention, Reck says.

“Once we recruit new staff, we want to keep them. My job is to make their experience so challenging and wonderful that they never want to leave us or leave the profession,” she says.

The hospital has created externships for nursing college students and fourteen 22-week graduate intern program for newly graduated nurses to help bridge the gap between their classroom and clinical experiences.

“We also encourage working nurses to advance their education,” she says.

The Medical Center offers a tuition reimbursement program for nurses who want to pursue advanced academic degrees and provides in-house courses for those who want to specialize in a certain type of nursing, such as pediatric and adult intensive care.

“We also try hard to reward nurses for a job well done,” Reck said. “I think most of the rewards of nursing come from the patients and their families, but from a management perspective, we try to reward them with educational opportunities to expand their knowledge, enhance their ability to care for patients and develop professionally.”

PATIENT CARE

James Fenush agrees that the rewards of his profession come from those whose lives he is trying to improve.

His career took root when he was a college student and his grandfather was undergoing treatment at Penn State Hershey Medical Center.

Fenush knew he wanted to pursue medicine, but he thought he would become a physician. After witnessing the compassionate care that nurses gave his grandfather—particularly two male nurses on the Life Lion team—Fenush knew that was the right place for him.

He earned his degree at Penn State University and interned in the critical care unit at the Medical Center. Eight years later, he’s the nurse manager for the Fourth Floor Surgical Unit, which cares for patients who have undergone surgery or trauma.

“It’s very challenging, very difficult work, but also very

rewarding,” Fenush says. “As a new graduate, you are faced with a lot of things you have never been faced with.”

Also, being a nurse means being a patient advocate and making decisions that are in the best interest of each patient.

“Sometimes you make a decision that doesn’t make you the most popular person with the rest of the staff, but you have to do what is right for the patient,” he said.

“I find my career very rewarding from two venues. First and foremost, it’s so gratifying to care for a patient who comes into the hospital, sometimes almost dead, and is now living a normal life. It’s rewarding to help families through a difficult time when a loved one is ill,” he said.

Also, as a manager, Fenush is able to make decisions that help his own nursing staff better do their jobs.

“Both of my jobs, as a nurse and a manager, really make a difference in people’s lives,” Fenush says. “What could be better than that?”

NURSES AS TEACHERS

For other nurses, like Terri Herb, one of the draws of Penn State Hershey Medical Center is the type of patients—often more critical, seriously ill patients—and the academic environment.

A 27-year veteran, Herb began her career as a critical care nurse but now, as the director of nursing education and professional development, oversees advanced educational opportunities for her colleagues.

She and 14 other nurses in her department teach specialty courses for nurses including trauma, critical care, pediatric and adult life support, oncology and neonatal perioperative nursing.

“One of the big draws of an academic environment is that it encourages nurses to teach others—patients, medical students, residents, other health care practitioners, as well as their nursing colleagues,” Herb says.

Nurses with advanced degrees also have the opportunity to teach in undergraduate and graduate nursing programs, to specialize in a certain area of nursing, or to become nurse practitioners.

“The role of the nurse practitioner is a new interest for nurses who want their own patient population,” Herb says.





“There are nurse practitioners in hospitals and community practices who are providing advanced skills and education to patients in special populations, including family practice, pediatrics, midwifery and women’s health.”

NURSE SCIENTISTS

Perhaps one of the best-kept secrets in nursing is that today’s nurses now have the opportunity to be key partners in medical research.

At Penn State Milton S.Hershey Medical Center, they are award-winning partners.

“I enjoy the challenges and diversity of nursing,” says Rosemary Polomano, PhD, RN, FAAN, Director of Outcomes Research. Once a clinical care nurse, she—like a growing number of nurses—has pursued a career as a researcher. Uniquely, Dr. Polomano has established both clinical- and basic science-oriented programs of research, leaving the bedside to generate information in the laboratory.

“The most rewarding aspect of being a researcher is to have the ability to change practice and to change the way that we deliver health care to patients, and this is immensely gratifying,” she says.

Working with nurse, physicians and other health professionals, Dr. Polomano is one of four nurse scientists at Penn State Hershey Medical Center who conducts patient-oriented research and monitors the outcomes.

Four studies that have been conducted by Medical Center nurses under the direction of Dr. Polomano have won national awards.

In one study, a nurse, Beverly Shirk, BSN, RN and music therapist, Janice Stouffer, MT-BC, examined the impact of music therapy on infants in the pediatric intensive care unit. Researchers monitored the vital signs of sedated infants and children who listened to audiotapes of their favorite music and audiotapes with music and their mother’s voice to determine which one was associated with improvements in physiological parameters such as heart rate, blood pressure and oxygen saturation and level of sedation.

The study showed that when infants and children listened to music with their mother’s voice they were more relaxed and their blood pressure was significantly lower. As a result of this study, nurses have developed a practice guidelines to use therapeutic music to calm critical pediatric patients.

The study was awarded the American Music Therapy Association Research Award, 2000 and the American Association of Critical Care Nurses Research Award, 2002.

In another outcomes study, researchers examined whether improved perioperative glycemic (blood sugar) control for surgical diabetic patients by using continuous intravenous insulin would lead to better clinical outcomes without increasing the cost of hospitalization.

“Normally, we monitor the patient’s blood glucose or sugar on an intermittent basis and give insulin in response to abnormally high blood glucose levels, and repeat this at intervals to maintain normal blood glucose. We conducted the study to evaluate the economic impact of changes in practice,” Dr. Polomano said.

The study revealed that administration of continuous insulin infusions during and immediately after surgery does not increase the cost of hospitalization; and therefore, clinicians will use this technique in routine clinical care. This is an example of how research influences practice. This study also received the American Association of Critical Care Nurses Research Award, 2002.

“Unlike other types of nursing, the benefits of research are not often immediate. Careful analysis of data and interpretation of the results are required before using research findings in practice,” says Dr. Polomano. “But it is rewarding to see our research improving patient care and outcomes.” ■



'75

In April, **Victor Gambone, M.D.**, was elected a Fellow of the American College of Physicians—American Society of Internal Medicine. Dr. Gambone works in the Tampa area with frail elderly patients in a long-term care setting.

'77

John J. Messmer III, M.D., medical director of Penn State University Physicians Group practice in Palmyra, was nominated for Pennsylvania Family Physician of the Year. Dr. Messmer was one of only 40 doctors in the state to be so honored. The award recognizes family practitioners who "serve as role models professionally and personally to their communities, other health care professionals, family practice residents, and medical students."

Robert Moore, Sr., M.D., is a senior partner with Anesthesia Associates of Lancaster, Ltd. and is doing a wide variety of both inpatient and outpatient anesthesia.

'78

Donald Dipette, M.D., has accepted the position of chair of the Department of Medicine at Texas A&M.

'84

John D. Baxter, M.D., associate professor of medicine at Robert Wood Johnson Medical School, and his research team are investigating HIV drug resistance to AIDS therapies, funded by four concurrent federal grants totalling more than \$6 million.

'87

Andre J. Behnke, M.D., and his family have relocated to Carlisle, PA where he works as an endocrinologist with Carlisle Hospital.

'92

Michael J. Christ, M.D., is a U.S. Army Major now stationed in Honolulu, Hawaii where he serves as Medical Director of Neonatal Intensive Care at Tripler Army Medical Center. Dr. Christ recently completed three years of service in Germany.

Chris Echterling, M.D. and his family are living near York, Pennsylvania where he serves as Medical Director of Community Health Center and as Medical Director of Health Connect Mobile Medical Outreach to Indigent Families. In addition, Dr. Echterling sits on the Board of Directors for the new independent elementary school his son attends.

'94

Mark E. Lavalley, M.D., is serving on the Board of Directors of the Ehlers-Danlos National Foundation, where he is working to raise funds and develop community and physician awareness of this rare connective tissue disorder.

'96

Christina Bruno, M.D., has joined the Glaucoma Clinic at the University of Michigan Kellogg Eye Center. In addition to her clinical work, she will hold a faculty position as clinical instructor for the Department of Ophthalmology and Visual Sciences at the University of Michigan Health System.

'97

Leslie Schwartz, M.D., and her husband Gregory Farino, M.D. will be leaving the Pittsburgh area in 2003 for sunny Florida where she will be working with a gastroenterology group.

Karen Vossen Smirnakis, M.D., Ph.D., has been named chief resident at Massachusetts General Hospital after completing the clinical phase of her MGH-BWH Joint Fellowship in nephrology. ■



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COMMENCEMENT | 2002

Not just Pomp & Circumstance

by E. Nan Edmunds

Commencement is an ending for the Penn State College of Medicine Class of 2002. As its name implies, it also marks a beginning. In the fall of 1998, this class entered on the cusp of the new century with two years in the 20th Century and two in the 21st. They were innocent, full of hope, ready for four years of intensive study, prepared to do their best, and committed to one of the finest, most highly regarded professions in our culture. Like all who answer a calling, the members of this class were where they wanted to be: Penn State College of Medicine. And, like all classes, they looked forward to graduation. They did not know that their



Class, like the classes graduating from medical schools across the nation in 1942 or in 1964, would forever be identified by a national calamity. As trusting and confident as the thirty-one classes at Penn State who had preceded them, the Class of 2002 was also to have

an awakening that will forever change their destiny. Their Commencement, their alpha and omega, was to be like no other, yet, on that moment, on May 19, 2002, they were ready for whatever the world placed before them. Their Commencement, with all its tradition, its honors, its defining moment of passage, for that bright shining hour, was, indeed, full of pomp and ceremony, but more important, it marked a life circumstance and experience shared with colleagues whose lives forever more would be entwined in an event of history and a charge to meet the challenges of an unknown future.

David W. Chia, M.D., '02, captured the essence of the Class of 2002's medical school experience in his Commencement Address:

"In the years since the White Coat Ceremony that marked the beginning of our voyage into the world of medicine, we have been privy to not only the turn of the new millennium, but have also witnessed catastrophic threats to our security and livelihood, seen the conclusion of the Human Genome Project, and even survived the merger and subsequent demerger of this institution.

How times have certainly changed! The pace of progress in the medical field has accelerated to the point where care guidelines change almost faster than the pace with which we publish them. Some disease diagnosis and treatment standards that we learned as second-year students were even outdated by the time we started the wards. I imagine that this is not a trend that will be ending soon. Rather, we are now well aware that medicine based solely on traditional scientific methods is not enough to treat today's Internet-enabled patients in their Web-connected communities. The challenges we face include not only those of battling increasing litigation and cost but also providing equal access to care and resources, enabling patient rights as well as physician rights, and the formidable task of keeping current with the latest standards of care and technological developments.

However, despite the growth of its complexities, it is also reassuring that the fundamental tenets of medicine will forever remain the same. At its core, the practice of medicine will always be about loving people, and cherishing human life in its infinite diversity.

Even as medical students, it has been a phenomenal pleasure and privilege to serve the community in the limited capacity that we have been able. We shared in the rich life stories of the patients we cared for. We experienced the profound trust shared between physician and patient. We freely crossed the boundaries of social convention in our search for truth to help dispense comfort and cure. So we realize with great humility the knowledge, power, and





responsibility that comes with our formal initiation into the great profession. We dare not violate the sanctity of our social contract—nor our morals—

nor our integrity. Speaking from my own perspective, I do not imagine that this will present much of a problem for I have witnessed time and time again the unabashed pursuit of these ideals by my peers. Hence, I feel supremely honored to sit amongst your number—as a fellow colleague—as we continue to strive towards the promise—not of better medicine—but better health.

The concept of health, as we have learned, encompasses far more than treating the individual patient. We cannot treat a patient in isolation—segregating the person from the relationships that define that individual is impossible. So we cannot and should not ignore those issues that seemingly lie beyond the scope of our treatment. It is our right as those best versed in the intricacies of our increasingly complex health system to advocate for our patients' needs and shape policy with an understanding of the larger community issues at stake.

This idea of a community is a powerful one, and is fortunately one that this institution not only takes seriously, but lies at its foundation. What other institution could hope to surpass the rigor and unity of spirit of our hallowed chant, "We Are Penn State," when thundered throughout Happy Valley and carried with equal dignity at the medical frontlines by our number in hospitals and clinics throughout this proud nation.

Being able to sit here at this juncture and ponder these truths makes us realize the great debt of gratitude we owe to so many people. Not just the friends who have encouraged us, or the family members who have stood by us—but the physicians, faculty, and patients who have taught us so much, the nurses and staff who have thanklessly helped us and the myriad of other people we have come across in our travels. We owe you all an eternal debt of gratitude for which the only suitable recompense shall be the diligent and thoughtful care of others. It is in this spirit of gratitude that we renew our Oath to the service of all humankind."

On a More Personal Note

When asked his thoughts on his own College of Medicine experience, Dr. Chia stated, "Penn State is

progressive in its curriculum. Our school was among the early adopters of the whole Case-Based Learning (CBL) experience. CBL helps to focus on the learning and critical thinking skills necessary for administering modern medicine and not rote memorization." He added, "Another advantage that the College of Medicine offers is the diversity of institutions that medical students are able to rotate through—being able to directly compare urban medicine with rural medicine with suburban medicine is really unique to Penn State. Like many students, I had a chance to spend my core third-year clerkships in each of these environments—from the internationally renown urban environments provided by Cleveland Clinic Foundation to the rural/suburban settings provided by Harrisburg, Reading, Lebanon, York, Allentown, and Hershey. I also enjoyed the unique opportunity to extend this experience by spending four months out of the country, January–April 2002, studying medicine in New Zealand, China, and Taiwan.

He continued, "As this same time period was critical for applying to residencies and participating in the Match process, I was taking a gamble by completely missing both of my Match Days. Through electronic communication, I was successfully matched to my top program choices though I was literally on the other side of the world. Speaking frankly, had I not been a student at Penn State, this opportunity would not have happened."

"Being able to stay within the framework of Penn State as an intern was also an important factor in my residency search," he said. "I was very pleased to accept the residency training position at my number one choice, our academic affiliate Lehigh Valley Hospital this year."

Looking Forward;

Looking Back

Like her classmate, David Chia, Sonia Badreshia, M.D., also has vivid remembrances of her years at Penn State College of Medicine. Both students and alumni will no doubt recall many of these same incidents common to the life of a medical student.



"Where are you from?" "California," I timidly replied to a handful of friendly medical students during orientation. The earlier decisions and now actually being here attending medical school certainly brought a whirlwind of paradoxical emotions and unmasked a few embedded insecurities. After meeting my colleagues during orientation and the faculty who would soon become my teachers and advisors, I quickly felt more at ease.

First Year: Apprehension turns to intrigue

Dissecting corpses was undoubtedly the most intimidating, challenging, and anxiety-provoking experience of my first year of medical school. But, curiously enough, I felt regret when it was over. I recall that studying about the thousands of intimate and minute details regulating the human body to promote homeostasis was also overwhelming, and at the same time, intriguing.

Second Year: Participation instills confidence

Year two was marked by strengthened peer relationships and greater opportunity for student participation—both in the school and in the Community. I discovered enriching experiences in leadership roles in "Medicine Without Borders" and "Rural and Underserved Medicine" while continuing as an active member in the American Medical Association, American Medical

Women's Association, and Health Policy Legislation Organization. My undergraduate years had instilled in me the importance for community service for the underprivileged. This inspiration led to a joint effort in the development of LION CARE, the Penn State student-run free medical clinic for the homeless, underserved and uninsured.

Academically, it became increasingly more interesting to learn about disease process and become aware and active in performing medical decisions through participation in case-based learning.

Third Year: Decisions mean change

Third year brought the most clinical exposure and deepest understanding of medicine as an art through integration of classroom learning and hands-on training. It was also marked by turmoil as my classmates struggled to choose a specialty that fit. I was among the fortunate few who were certain relatively early what their futures held—my choice was dermatology.

However, during this period I faced other confusing personal issues—financial hardship as well as troublesome family circumstances. At this time, I also became guardian of my 15-year-old sister. This experience, though nearly overwhelming at times, successfully tested my ability to handle both personal and academic challenges.

Fourth Year: From excitement to reflection

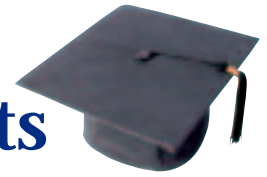
Fourth year challenges brought great amounts of anxiety as well as excitement as everyone applied and interviewed for respective specialties while continuing with clinical rotations. However, by Match Day, there was an aura of peace about the paths that would be taken and nostalgia for the countless hours spent endeavoring to arrive at our chosen destinations. There was finally time to look back on the efforts invested in achieving our goals and building lasting friendships with peers, faculty, and the medical community.

Now we look ahead as we turn in our hard-earned tickets for the next roller coaster ride—serving our internships."

These and many other situations are what make the medical school experience so compelling. Many years after graduation, alumni still define themselves by these four years and the foundation that prepared them for each commencement of their lives, both looking back and looking forward. Once together with classmates, they are never separated from Penn State. ■

"Dissecting corpses was undoubtedly the most intimidating, challenging, and anxiety provoking lesson of the first year."

– SONIA BADRESHIA, M.D.



Class of 2002 Matching Program Results

On March 21, at noon, College of Medicine students gathered in the Hospital Auditorium to participate in annual Match Day ceremonies. Match Day is a national tradition in which soon-to-be-graduated medical students throughout the United States simultaneously open letters to learn what hospital or other healthcare provider has accepted them into a residency program.

Christine Annunziata Washington Hosp Ctr, DC <i>Medicine Preliminary</i> UCLA Medical Center, CA <i>Ophthalmology</i>	Jooyeun Chung Thomas Jefferson Univ, PA <i>General Surgery</i>	Jeffrey Feinblatt Ohio State Univ Med Ctr, OH <i>Orthopaedic Surgery</i>	Danella James UC San Diego Med Ctr, CA <i>Internal Medicine</i>
Sonia Badreshia Penn State Hershey <i>Medicine Preliminary</i>	Hillary Copp University of Virginia, VA <i>Surgery Preliminary</i> University of Virginia, VA <i>Urology</i>	Heather Follett UC San Diego Med Ctr, CA <i>Internal Medicine</i>	Chadwick Johr Rhode Island Hosp/Brown U, RI <i>Medicine/Pediatrics</i>
Vivek Bansal Penn State Hershey <i>Surgery Preliminary</i> Penn State Hershey <i>Plastic Surgery</i>	Kristin Cox Penn State Hershey <i>General Surgery</i>	Robert Gallo Allegheny Gen Hosp, PA <i>Orthopaedic Surgery</i>	Carrie Judy Eglin Air Force Base, FL <i>Family Practice</i>
Christopher Bewley Georgetown Univ Hosp, DC <i>Transitional</i>	Shane Danielson Albert Einstein Med, PA <i>Psychiatry</i>	Carl Gray NY Med Coll SVCMC, NY <i>Family Practice</i>	Matthew Kaag Penn State Hershey <i>Urology</i>
James Birkholz Hershey/Penn State, PA <i>Medicine Preliminary</i> Hershey/Penn State, PA <i>Radiology-Diagnostic</i>	Heather Davies OSU/Children's Hosp, OH <i>Pediatrics</i>	Sayer Gunn Baystate Medical Center, MA <i>Internal Medicine</i>	Sujani Kakumanu Brown U Int Med Res, RI <i>Internal Medicine</i>
Adrienne Boissy Cleveland Clinic Fdn, OH <i>Neurology</i>	Anthony Davis Western Reserve Care System, OH <i>General Surgery</i>	Chad Haldeman-Englert Maricopa Med Ctr, AZ <i>Medicine/Pediatrics</i>	Hamed Kargozaran UC Davis Med Ctr-Sacramento, CA <i>General Surgery</i>
Darren Boyack Christiana Care, DE <i>Emergency Medicine</i>	Ritesh Dhar New England Med Ctr, MA <i>Internal Medicine</i>	Lanniece Freeman Hall Reading Hosp/Med Ctr, PA <i>Obstetrics-Gynecology</i>	Jed Katzel St. Vincents Hosp, NY <i>Internal Medicine</i>
Scott Brancolini Allegheny Gen Hosp, PA <i>Medicine Preliminary</i> Univ Health Ctr of Pittsburgh, PA <i>Anesthesiology</i>	Kelly Doerzbacher Univ North Carolina Hosp, NC <i>Anesthesiology</i>	Lisa Hamaker Thomas Jefferson Univ, PA <i>Internal Medicine</i>	Brian Keener Penn State Hershey <i>Orthopaedic Surgery</i>
Yolanda Brown Einstein/Jacobi, NY <i>Pediatrics</i>	Kendra Dolan York Hospital, PA <i>Emergency Medicine</i>	William Harvey Thomas Jefferson Univ, PA <i>Internal Medicine</i>	Shaina Kelly UPMC St Margaret, PA <i>Family Practice</i>
Sidhartha Chandela Einstein/Montefiore, NY <i>Surgery Preliminary</i> Albert Einstein COM, NY <i>Neurosurgery</i>	Christopher Donaldson University of Maryland, MD <i>Ortho. Research</i>	Ami Hatta Hurley Medical Center, MI <i>Transitional</i>	Daniel Kiefer Lehigh Valley Hosp, PA <i>Obstetrics-Gynecology</i>
David Chia Lehigh Valley Hosp, PA <i>Transitional</i> U Maryland, MD <i>Ophthalmology</i>	Marcus East Penn State Hershey <i>Medicine Preliminary</i> Penn State Hershey <i>Ophthalmology</i>	Bret Haymore Wm Beaumont Army M.C. TX <i>Internal Medicine</i>	Karin Krakovsky Memorial Hosp, RI <i>Family Practice</i>
	Joseph Enama Penn State Hershey <i>Internal Medicine</i>	Jeffrey Hodrick Duke Univ Med Ctr, NC <i>Orthopaedic Surgery</i>	Erik Krushinski Univ Maryland Med Ctr, MD <i>Orthopaedic Surgery</i>
	Frank Essis Einstein/Montefiore, NY <i>Orthopaedic Surgery</i>	Robert Holland Brown U Int Med Res, RI <i>Internal Medicine</i>	LaToya Linton Univ Hosps Cleveland, OH <i>Internal Medicine</i>
		Brian Hutchinson Wright State Univ SOM, OH <i>Orthopaedic Surgery</i>	

continued on page 16



by Valerie Gliem
photos by John Biondo

Patients

teaching lessons of the heart

*“It is a safe rule to have no teaching without a patient for a text,
and the best teaching is that taught by the patient himself.”*

—William Osler, 1849-1919

Sir William Osler, the much beloved physician and professor of medicine who transformed medical education in the United States, provided the model for patient-centered medicine, pioneering a warm and friendly disposition at a time when medicine was dominated by the cold and formal.

Osler's words inspire The Patient Project, a unique course for first-year Penn State College of Medicine students. Unlike many of the other introductory medical school classes, the teachers are chronically ill patients, the classroom is a patient's home, and lessons cover compassion, understanding, relationships, strength and love.

“There are certain things that patients can teach students that nobody else can teach them,” said Anne Hunsaker Hawkins, Ph.D., associate professor of humanities and The Patient Project founder. “We feel that the individual patient's experience of illness is just a central part of everything we do here.”

Timing is important. The demands of medical school can often cause a student to lose sight of the very reasons they went into medicine in the first place. Most of the first two years of their education is spent poring over textbooks and cadavers, and spending countless hours studying the diseases that will plague their future patients.

“One of the hardest things for us to do today with all of the advances in technology, in new drugs, in understanding the very workings of genes, is to remember that

science shouldn't stand at the center of our relationships, but that the patient should stand at the center of our relationships,” said Darrell Kirch, M.D., senior vice president for health affairs and dean of Penn State College of Medicine, and CEO of the Penn State Milton S. Hershey Medical Center.

The Patient Project provides critical perspective, allows students to interact with patients almost two years before they would otherwise, and taps in to new medical students' excitement about their professional calling.

The Course: Patients, Physicians and Society 1

The Patient Project is deliberately couched in the first year before students have had much exposure to the technical side of medicine.

“If all you concentrate on is chemistry, anatomy and physiology, you lost sight of the patient as a whole person,” said George Simms, M.D., Ph.D., professor emeritus of family medicine, who helped to establish The Patient Project and recruited patients to participate. “Students early on need to be exposed to the human side of medicine.”

The Patient Project is a long and careful process that begins with clinicians who recommend chronically ill children and adults to the program. After patients verbally agree to participate, Patricia Wiesman, The Patient Project Coordinator, Office of Medical Education, sends each of them a letter and a consent form.

The student also signs an agreement. Both forms

ensure confidentiality and outline the roles of both the students and patients. For example, the student form indicates that at no time should the student perform a physical examination, offer medical advice or get involved in any way with the patient's medical care.

Students are then divided into pairs and assigned a patient who they visit in the home at least once every other month. Students record their experiences in a journal, ensuring confidentiality by creating pseudonyms for their patients. They are also required to make oral reports and complete a "rich history" essay that demonstrates clinical, behavioral, social and humanistic issues relevant to their patients.

Students aren't permitted to review their patient's medical record until three-quarters of the way through the course. There's a good reason for that.

"It's absolutely essential that they talk about the patient experience and not the patient disease," Dr. Hawkins said.

The course allows students to practice their interviewing and listening skills, put a patient's illness in the context of the home and become familiar with the family's support system.

Chris Ehmann, M.D., recalls a patient he referred and the relationship that developed between the patient, a social worker with acute leukemia, and the students.

"They became quite close and both students were with her at her death in the hospital," Dr. Ehmann said.

"She was very special to be able to share her thoughts and feelings as she was dying. I don't think we can teach anything as powerful as that."

Evolution of The Patient Project

The Penn State College of Medicine has had a Department of Humanities since the first students began in 1967. The first of its kind at any medical school, the department was formed in response to the new knowledge and technology in biomedical sciences and the sometimes conflicting goals of medical advancement and concern for human values.

When the medical school was first established, each student was assigned a family that they would follow through all four years of their training, meeting with them when they came to the Medical Center for appointments. This program was called "The Family Project."

The course was later abandoned because it became too difficult to administer and often required that students miss other classes to attend their patients' appointments.

When Dr. Hawkins joined the Department of Humanities in the early 1990s, she saw a need in the medical school curriculum for students to interact with patients in the first two years.

She knew about a successful student-patient project affiliated with the Department of Social Medicine at the University of North Carolina Medical School and adapted that program to fit the medical school program at Penn State. Hawkins called the Penn State program "The Patient Project" to recall as well as differentiate it from the earlier "Family Project."

Dr. Hawkins wanted The Patient Project to parallel



the incoming students' experience in the gross anatomy course. "It was disconcerting to realize that the only 'patient' the students experienced in their introduction to medical school was a cadaver!" she said.

Including The Patient Project in the first-year curriculum realized the College's goal to put more emphasis on the relationships between the technical and the humanistic aspects of medical education.

At first, Dr. Hawkins introduced the Patient Project as a pilot, randomly selecting only 18 first-year students to participate. During the next three years, the program expanded until every first-year student was involved. To date, 848 medical students have participated.

"The beauty of The Patient Project is that we're exposing the students to certain component parts of medical education which they don't get in the classroom or the hospital," Dr. Simms said. He hopes students gain an "understanding how a family hurts desperately when one member of the family is hurting."

Relationships

Fran Hultzapple, a breast cancer survivor, has participated in The Patient Project since it began.

"I've committed to participating in sharing the breast cancer experience with medical students," Hultzapple said. "I'm so satisfied to be able to share my experience with medical students because I know that I'm talking to them at a time when they are receptive to the patient experience. As classes get tougher they need to focus more on technical skills."

Stacy Egert was one of the first-year medical students paired with Fran.

"It was awesome just to see her side of things," Egert said. "When you're in the hospital, all you see is the treatment side and you don't see how it's affecting their lives at home."

In addition to talking with Hultzapple, Egert was able to meet with Fran's husband, Denny, and ask him how he was affected and how their relationship changed.

Egert also learned a delicate and important lesson from Hultzapple who conveyed her likes and dislikes about the ways physicians treated her. Dr. Hawkins said this type of honesty can be a reality check for students but provides a crucial service.

"We feel that positive and negative

models, as well as looking at the profession critically, are important all through medical school," Dr. Hawkins said. "If everything was always perfect in medical encounters, we wouldn't need courses like these."

Torre Ruth and Abigail McMillan were paired with Jarrad Trythall, 17, of Dauphin and his parents, Cindy and Steve Trythall. Jarrad, treated by Brandt Groh, M.D., has sarcoidosis, a chronic illness that causes his throat to swell and will eventually require a tracheotomy.

"We're hoping that talking to us could help them (the students)," Steve Trythall said. "It's not a debilitating, life-threatening disease. We roll day to day with it."

McMillan learned how illness can affect a young person's life. "Growing up as a healthy teen, you don't think about that," she said.

Ruth said, "we are taught to believe in always trying to treat the patients as individuals, and this was something to really drive it home."

The Reception

The Doctors Kienle Center for Humanistic Medicine sponsored the first-ever Patient Recognition Reception for participants in The Patient Project May 6, 2002. "It gave students the opportunity to show their appreciation to their patients for their participation and it gave the patients the opportunity to say their farewells and best wishes," said Wiesman.

In all, 55 patients and 110 medical students attended. Children were given Life Lion coloring books and posters and each patient was given a sunflower.

One student speaker, Katerina Nacopoulos, made a poignant expression of her thanks that embodies the goal of The Patient Project.

"I hope you all know how incredible you are," she told the crowd. "The books don't show us that strength in a human being. Thanks for the opportunity to explore what's in our hearts." ■



From Division to Department:

We Are Penn State Department of Dermatology

The goal of dermatology at Penn State Milton S. Hershey Medical Center and Penn State College of Medicine has always been to provide excellent patient care from within the setting of an academic institution. In addition, our unique body of knowledge in cutaneous biology and pathology plays an integral role in the education of students and residents at Penn State Hershey Medical Center, the College of Medicine, and throughout Penn State University. We are proud that our success has been recognized, and that we have been formally named Department of dermatology. As a Department, our academic excellence and mission balance will be expanded and strengthened.

PENN STATE Dermatology

In a significant step for dermatology services in the Central Pennsylvania region, what was formerly the Division of Dermatology at Penn State Hershey Medical Center has been granted full departmental status as of July 1, 2002. From its first founding by Donald Lookingbill, M.D. in 1975, dermatology has held a respected position within the Medical Center and across the region. The new Department of Dermatology at Penn State Hershey Medical Center will bring renewed focus to the missions of education, research, and clinical care.

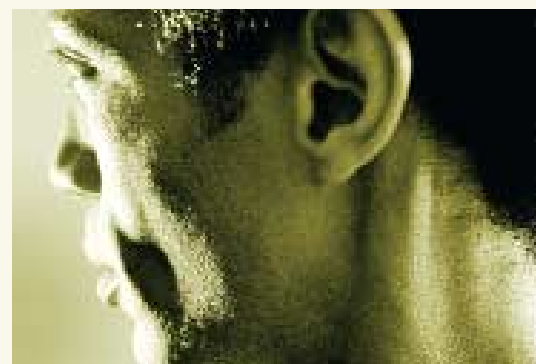
Perhaps most enhanced by full departmental status are the areas of research and clinical care. As a Department of Dermatology, researchers at Penn State Hershey have expanded opportunities to secure research funding and form partnerships with their counterparts at other research institutions. Dual appointments within the Medical Center will promote cross-departmental cooperation and foster innovations in care.

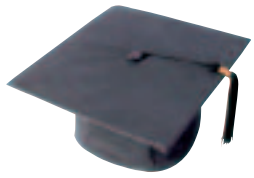
"Departmental status definitely allows for easier collaboration with other departments of the Medical Center, as well as with other comparable research

facilities," says James Marks, M.D., interim chair of Dermatology. "We are also now in a better position to attract the best residents and faculty to our program."

The residency program in dermatology has been fully accredited by the Accreditation Council for Graduate medical education since 1982, and currently receives an average of 275 applicants each year for only two residency slots. Over the coming three years, the new Department of Dermatology plans to add additional residents at a rate of one a year.

Other future objectives of the Department of Dermatology include the addition of M.D. and Ph.D. students to the research team, and the creation of new fellowships in dermatopathology and dermatologic surgery. ■





Matching Program Results (cont'd)

<p>Helena Longin Walter Reed Army MC Washington, DC <i>Transitional</i></p> <p>Stefanie Lowas U Kentucky Med Ctr, KY <i>Pediatrics</i></p> <p>Andrew Lutz Duke Univ Med Ctr, NC <i>Anesthesiology</i></p> <p>Brenda MacKnight Penn State Hershey <i>Medicine Preliminary</i> Johns Hopkins Hosp, MD <i>Anesthesiology</i></p> <p>Brenda Marshall Penn State Hershey <i>Internal Medicine</i></p> <p>Zinaida Matlyuk Maimonides Med Ctr, NY <i>Medicine Preliminary</i> Penn State Hershey <i>Radiology-Diagnostic</i></p> <p>Mark Matthews Emory Univ SOM, GA <i>Internal Medicine</i></p> <p>John McAllister University of Virginia, VA <i>Anesthesiology</i></p> <p>Heidi McMillan Penn State Hershey <i>Pediatrics</i></p> <p>Nicholas Mehta University of Cincinnati, OH <i>Otolaryngology</i></p> <p>Kyle Messick SUNY HSC @Syracuse, NY <i>Orthopaedic Surgery</i></p> <p>Brian Miller U Utah Affil Hospitals, UT <i>Otolaryngology</i></p> <p>Christopher Moen Christiana Care, DE <i>Emergency Medicine</i></p>	<p>Naser Moiduddin Cleveland Clinic Fdn, OH <i>Internal Medicine</i></p> <p>Matthew Moyer Penn State Hershey <i>Internal Medicine</i></p> <p>Elizabeth Mullakando Einstein/Montefiore, NY <i>Obstetrics-Gynecology</i></p> <p>Leroy Nickles York Hospital, PA <i>Emergency Medicine</i></p> <p>Ngozi Onukogu St Barnabas Med Ctr, NJ <i>Obstetrics-Gynecology</i></p> <p>Jay Parkinson St. Vincents Hospital, NY <i>Pediatrics</i></p> <p>Parag Patel Penn State Hershey <i>Medicine Preliminary</i> Penn State Hershey <i>Ophthalmology</i></p> <p>David Riedel Johns Hopkins Hosp, MD <i>Internal Medicine</i></p> <p>Brandon Rodriquez Naval Med Ctr, Portsmouth, VA <i>Transitional</i></p> <p>Rebecca Rosenberg Yale-New Haven Hosp, CT <i>Pediatrics</i></p> <p>Heather Rowell U Rochester/Strong Mem, NY <i>Pediatrics</i></p> <p>Colleen Ryan U Colorado SOM-Denver, CO <i>Family Practice/Rose Med Ctr</i></p> <p>Samuel Santala Cleveland Clinic Fdn, OH <i>Pathology</i></p> <p>Marnie Santaniello Lehigh Valley Hosp, PA <i>General Surgery</i></p>	<p>Corbett Schimming Mt Sinai Hospital, NY <i>Psychiatry</i></p> <p>Kathleen Sheridan Penn State Hershey <i>Obstetrics-Gynecology</i></p> <p>Joseph Shvidler Tripler Army Med Ctr, Honolulu, HI <i>Surgery</i></p> <p>Matthew Silvis Wake Forest U Baptist Med Ctr, NC <i>Family Practice</i></p> <p>Christopher Sirard Lehigh Valley Hosp, PA <i>Transitional</i> UC Davis Med Ctr-Sacramento, CA <i>Anesthesiology</i></p> <p>Surendra Sivarajah Penn State Hershey <i>Medicine Preliminary</i> Penn State Hershey <i>Internal Medicine</i></p> <p>Harvey Smith Thomas Jefferson Univ, PA <i>Orthopaedic Surgery</i></p> <p>Michele Soltis Madigan Army Med Ctr, Tacoma, WA <i>Transitional</i></p> <p>Marcella Spera U New Mexico SOM, NM <i>Pediatrics</i></p> <p>Ike Stewart Reading Hosp/Med Ctr, PA <i>Family Practice</i></p> <p>Kim Swindell Cleveland Clinic Fdn, OH <i>Pediatrics</i></p> <p>Rebecca Tauber Penn State Hershey <i>Medicine Preliminary</i> Penn State Hershey <i>Radiology-Diagnostic</i></p> <p>Sabu Thomas Cleveland Clinic Fdn, OH <i>Internal Medicine</i></p>	<p>Joshua Tice National Naval Med Ctr, Bethesda, MD <i>Transitional</i></p> <p>Beth Townsend Penn State Hershey <i>Psychiatry</i></p> <p>Evan Trost Scottsdale HC-Osborn, AZ <i>Family Practice</i></p> <p>Chheany Ung Penn State Hershey <i>Anesthesiology</i></p> <p>David Vega York Hospital, PA <i>Emergency Medicine</i></p> <p>Lucy Wang U Washington Affil Hosps, WA <i>Psychiatry</i></p> <p>Jason Wells U Rochester/Strong Mem, NY <i>Pediatrics</i></p> <p>Valerie Williams U Rochester/Strong Mem, NY <i>General Surgery</i></p> <p>Kimberly Wolfe York Hospital, PA <i>Family Practice</i></p> <p>Bonnie Woo Einstein/Montefiore, NY <i>Medicine Preliminary</i> U Texas, San Antonio, TX <i>Ophthalmology</i></p> <p>Michael Yeager St Lukes-Bethlehem, PA <i>Obstetrics-Gynecology</i></p> <p>Gabrielle Yeaney Vanderbilt Univ Med, TN <i>Pathology</i></p>
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**Congratulations and
Best Wishes to all
of our new grads!**

Children's Hospital Research Day a Study in Success

Researchers, clinicians, students and other medical professionals celebrated current research and the promise of tomorrow's medical advances at the inaugural Penn State Children's Hospital Research Day May 30, 2002.

The event was one of sharing, surprises, teambuilding and opportunity all in the name of children. More than 150 people attended the oral presentations, poster sessions and luncheon.

"The day was a fantastic success attended by a broad range of investigators from throughout the Medical Center," said Craig Hillemeier, M.D., chair of the Department of Pediatrics and medical director of the Penn State Children's Hospital. "I have heard many comments regarding the potential collaborations that will result from Research Day."

The goal of Research Day was to promote collaboration and innovation among researchers and caregivers at Penn State College of Medicine, at other Penn State campuses and in the community.

"Researchers at Penn State College of Medicine innovate and solve problems that help our young patients at Children's Hospital, and we do it well," said Charles Palmer, M.B., Ch.B., professor of pediatrics (inset) and organizer of the Research Day events. "We want to open doors to more collaboration with colleagues in science, industry and medicine

who may bring additional skills to the table."

The day began with welcoming remarks by Darrell Kirch, M.D., senior vice president for health affairs at Penn State, dean of the College of Medicine and CEO of Penn State Milton S. Hershey Medical Center. Tony Pingitore, co-chair of the Children's Miracle Network Advisory Board, dropped by to express CMN's confidence in, support for and intentions to continue backing pediatric research.

Research Day presenters were: Drs. Palmer, Michael Chorney, Ph.D., Robert Cilley, M.D., James Connor, Ph.D., Robert Bonneau, Ph.D., David Phelps, Ph.D., Robert Vannucci, M.D., Cheston Berlin, M.D., Joanna Floros, Ph.D. and Robert Naeye, M.D.

"I think it was revealing just how many people were doing research or were interested in doing research that relates to children," said Dr. Palmer.

As a reference tool, Penn State Children's Hospital Research Day Committee created a booklet that lists the research interests and abstracts of nearly 50 researchers at Penn State College of Medicine.

In his presentation, Jay Moskowitz, Ph.D., associate vice president for health sciences research for



Penn State University and vice dean for research at Penn State College of Medicine, revealed his plan for the future of research which includes a "72 in 7" plan, a goal for a \$72 million increase in National Institutes of Health dollars in seven years for Penn State, and a \$72 million increase in total dollars in seven years for the College of Medicine.

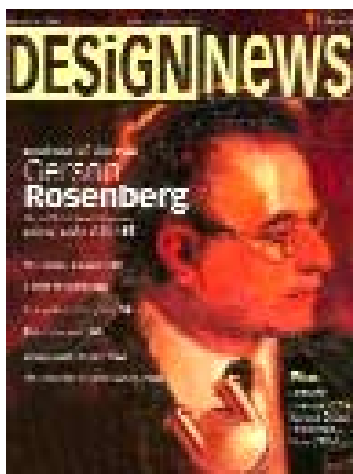
Even though the event has passed, the work isn't over for the Research Day Committee. The group, comprised of James Kendig, M.D., Barbara Ostrov, M.D., Neal Thomas, M.D., Keith Verner, Ph.D., Patricia Snyder, and Drs. Palmer, Chorney, Floros and Phelps, will continue to think about how to encourage research involvement.

"Everyone could be a card-carrying member of the Children's Hospital research effort," Dr. Palmer said.

Due to the success of the event, Children's Hospital Research Day was made an annual event and will take place just prior to the CMN telethon. ■



Rosenberg Named 2002 Engineer of the Year



Gerson (Gus) Rosenberg, Ph.D., Jane A. Fetter Professor of Surgery, professor of bioengineering, chief, Division of Artificial Organs at Penn State Milton S. Hershey Medical Center and Penn State College of Medicine, and a pioneer in the design and development of pumps to assist—or replace—failing

hearts, has been named 2002 "Engineer of the Year" by the readers of *Design News* magazine. *Design News* is read twice monthly by 335,000 engineers who design products ranging from autos to spacecraft. It is published by Cahners Publishing Co., Newton, Massachusetts.

Rosenberg has worked on heart-assist pumps since 1970 when he joined the Penn State research team as a graduate student. He earned his B.S., M.S., and Ph.D. degrees in mechanical engineering from Penn State.

U.S. clinical trials began for the Rosenberg team's implanted Left Ventricular Assist Device (LVAD), manufactured by commercial partner Arrow International, Inc., when in February 2001, Penn State's Walter E. Pae, Jr., successfully implanted the left ventricular assist system for the first in the United States. Called the Arrow LionHeart™, it is the first LVAD powered by wireless electric transmission. LionHeart™ is intended to help a large population that is ineligible for transplant and for whom medical therapy has failed. Surgeons in Europe have been implanting the device in clinical trials since 1999.

Rosenberg said that LVADs represent less risk to patients, both in surgery and later on. "With an LVAD, if there is a component failure, a patient can still rely temporarily on their own heart until the problem is solved," he said, "and because no wires or tubes protrude through the recipient's skin, the system reduces the chances for serious infection. LionHeart™ is intended to help this much larger population that is ineligible for transplant and for whom medical therapy has failed."

Rosenberg's team also has an electro-mechanical total artificial heart that is very close in concept to its LVAD.

Rosenberg has found another commercial partner, Abiomed, Danvers, Massachusetts, for this device. Abiomed developed AbioCor, a total artificial heart driven by an electro-hydraulic system that *Time* magazine called the "2001 invention of the year." Abiomed plans to do clinical trials in 2004 of a smaller version of the Penn State heart, suitable for women and children.

Abiomed CEO David Lederman said of Rosenberg, "Gus is one of the primary contributors to this field, and I have tremendous respect for him. We were competitors, but we also have shared a lot of information over the years."

Dr. Gus Rosenberg receives the 2002 "Engineer of the Year" award from Design News magazine.



In November 2001, the *New England Journal of Medicine* published the results of a three-year landmark study comparing survival rates of heart-failure patients with LVADs, versus those who remained on traditional drug therapies. The study found that those with LVADs lived twice as long and enjoyed a higher quality of life.

After three decades in the field, Rosenberg told *Design News* that it's a bittersweet feeling to turn his technical "babies" over to Arrow and Abiomed for commercialization. But he also knows that he and his team can now pursue new advances in the technology.

Rosenberg, the 15th *Design News* "Engineer of the Year," was honored at the annual *Design News* awards dinner, Tues., Mar. 19, at the Ritz Carlton Hotel, Chicago. His award included a \$25,000 educational grant from the Torrington Company, Torrington, Conn., which will go to the College of Engineering, Department of Biomedical Engineering at Penn. ■

Thiboutot awarded NIH grant to study oil glands

Diane Thiboutot, M.D., associate professor of dermatology, recently was awarded a National Institutes of Health grant—a \$1.3 million award—to study what controls oil production in the skin and how it can lead to acne.

This is the first NIH RO1, or independent investigator grant, awarded to Dr. Thiboutot and to Dermatology, which became Penn State College of Medicine's newest department July 1, 2002.

Acne, the most common skin disease affecting young people, can cause psychological distress, feelings of low self-esteem and can lead to permanent facial scarring. Oil production by sebaceous glands is a key factor in the development of acne.

"If we can understand how oil production is controlled, we'll be able to design better drugs that will inhibit oil production and improve acne," Dr. Thiboutot said.

Currently, isotretinoin (Accutane) and hormonal therapy can be used to treat acne. But because those drugs may cause significant side effects including birth defects, finding a safe and effective alternative is imperative.

Co-investigators on the project are Gary Clawson, M.D., Ph.D., professor of biochemistry and molecular biology and pathology, and Robert Gabbay, M.D., Ph.D., assistant professor of medicine in the Division of Endocrinology.

In addition to the NIH grant, Dr. Thiboutot recently was honored with the 2002 Society for Investigative Dermatology's Galderma Acne Research Award, which is meant to encourage new research in acne and encourage young investigators to specialize in this area of research. Her laboratory staff is focused on learning more about the role that hormones play in causing acne. ■

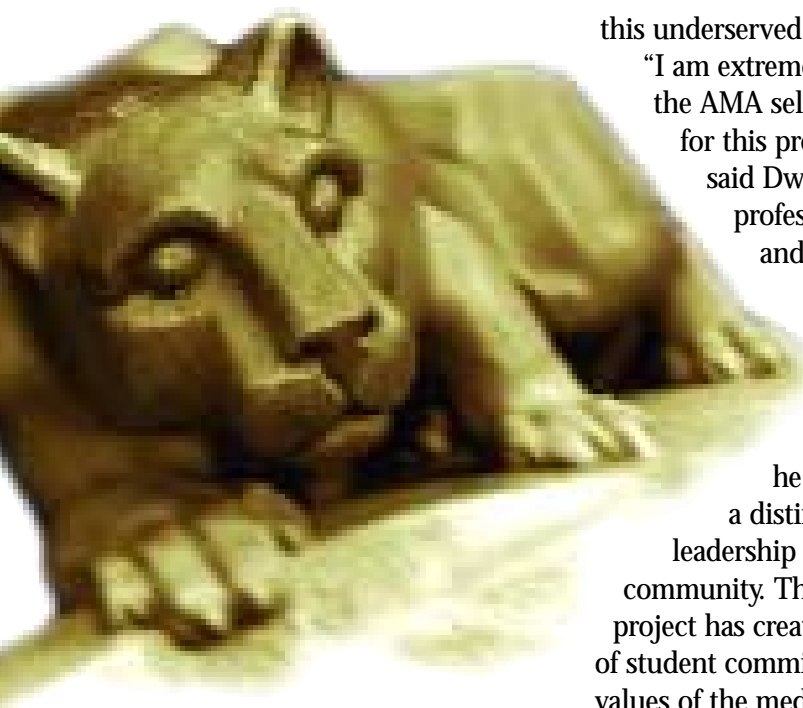


PREVIOUS WINNERS

Design News Engineer of the Year Award

- 2001** - Charles R. Munnerlyn, founder of VISX, for marrying optics and lasers in a revolutionary machine that dramatically improved the eyesight of millions.
- 2000** - P. Hunter Peckham, Cleveland FES Center, for his success in helping quadriplegics to use their hands again.
- 1999** - Lynn Otten, Medtronic, Inc., for her design of implantable technology to control tremors of Parkinson's Disease.
- 1998** - Brian Muirhead, Jet Propulsion Lab, for his leadership on the Mars Pathfinder mission.
- 1997** - Alan Mullaly, Boeing, who led the design team for the Boeing 777.
- 1993** - Bonnie Dunbar, for her contributions as a NASA astronaut.
- 1989** - Roland Reddington, General Electric, for his invention of the MRI machine.

2002 AMA Foundation Leadership Award Winner



Vivek Bansal, Penn State College of Medicine Class of 2002, has been named one of only 25 medical students in the nation to receive the 2002 AMA Foundation Leadership Award. The awards are presented annually to medical students who have exhibited outstanding leadership in organized medicine, civic, or non-clinical medical school or hospital related activities.

Bansal is the co-founder of LION CARE, Penn State College of Medicine's student-run clinic project for the homeless at the Bethesda Mission in Harrisburg. LION CARE was conceived to provide the homeless population with access to health care by providing free primary care services. In addition, LION CARE provides medical students, residents, and faculty members with a unique clinical experience and the opportunity to learn about the medical and social issues facing

this underserved community.

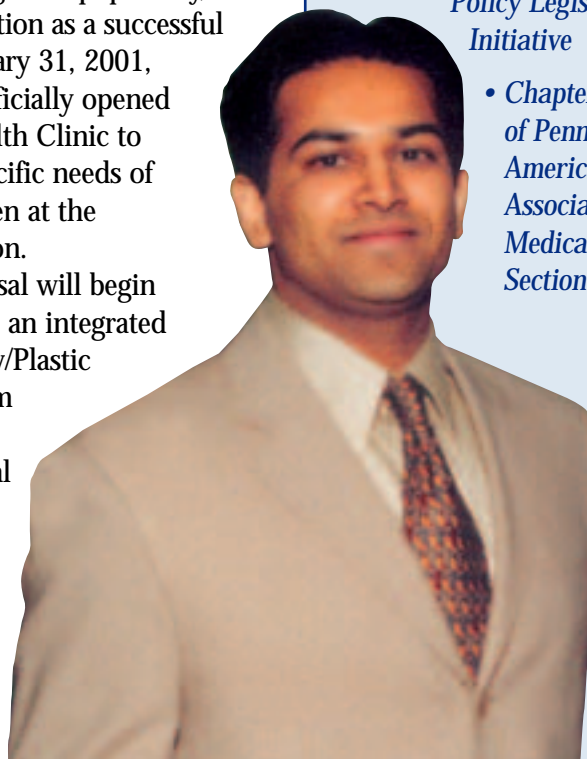
"I am extremely pleased that the AMA selected Vivek Bansal for this prestigious award," said Dwight Davis, M.D., professor of cardiology and associate dean for Student Affairs and Admissions. "In addition to maintaining his academic work, he has accumulated a distinguished record of leadership and service to the community. The LION CARE project has created a lasting legacy of student commitment to the values of the medical profession. We are extremely proud of this well-deserved and wonderful achievement."

Bansal says his inspiration for LION CARE was fueled by the compassion for outreach displayed by his fellow students, as well as their dedication to others. LION CARE quickly gained popularity, as well as a reputation as a successful clinic. On January 31, 2001, LION CARE officially opened a Women's Health Clinic to address the specific needs of homeless women at the Bethesda Mission.

In July, Bansal will begin his residency in an integrated General Surgery/Plastic Surgery program at Penn State Hershey Medical Center. ■

about Vivek Bansal

- Winner of the 2002 AMA Foundation Leadership Award
- Recipient of the Doctors Keinle Center for Humanistic Medicine 2001 Medical Student Humanitarian Award
- Recipient of the Teeter International Scholarship for support of outreach in a third-world country
- Winner of the Alpha Omega Alpha Student Research Fellowship
- Winner of the K. Danner Clouser Research Award
- Winner of the Mellinger Medical Student Research Award
- Co-founder of LION CARE outreach program providing health care to the homeless
- Medical student chair of Health Policy Legislative Initiative
- Chapter president of Penn State's American Medical Association-Medical Student Section.



'02 Alumni Fellow Dennis S. Charney, M.D., '77



Dennis S. Charney, M.D. '77 has been selected the 2002 Alumni Fellow at Penn State College of Medicine. The Alumni Fellow Award is the most prestigious award given by the Penn State Alumni Association to selected alumni who, as leaders in their professional field, are nominated by an academic college, and accept an invitation by the president of the University to return to the campus to share their

expertise with students, faculty, and administrators. The award is administered in cooperation with each of Penn State's academic colleges, and has achieved high academic prestige and visibility within the Penn State community. The Board of Trustees has designated the title of "Alumni Fellow" as permanent and lifelong.

Dr. Charney is the chief of the Mood and Anxiety Disorder Research Program and the Experimental Therapeutics and Pathophysiology Branch at the National Institute of Mental Health. This program is located in the NIMH intramural research division and is the nation's largest research group devoted to identifying the etiology of these disorders and discovering more effective treatment. Prior to joining NIMH, he was professor of psychiatry and deputy chair of Academic and Scientific Affairs at the Yale University School of Medicine. He is one of the nation's foremost investigators in the neurobiology and treatment of mood and anxiety disorders. He has made fundamental contributions to the understanding of neural circuits, neurochemistry and functional neuroanatomy of the regulation of mood and anxiety. Dr. Charney has been a highly successful extramural NIMH and VA grantee and has extensive experience directing large multidisciplinary research teams. He was the principal investigator of the VA National Center for Post-Traumatic Stress Disorder and the NIMH Yale Mental Health Clinical Research Center.

Dr. Charney has served on numerous national committees in the service of advancing our understanding of the causes and treatment of psychiatric disorders. He has been a member of the Food and Drug Administration Psychopharmacologic Drug Advisory

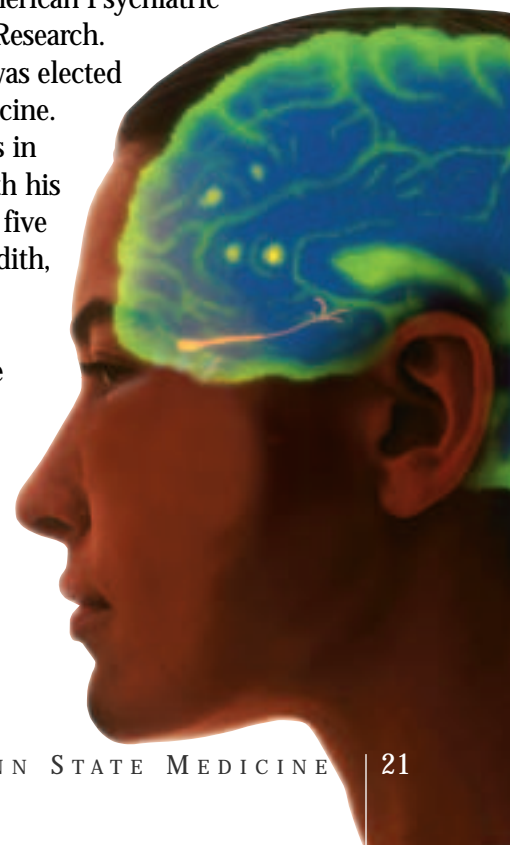
Committee. He has chaired the Board of Scientific Counselors for the National Institute of Mental Health and the Scientific Advisory Board of the Anxiety Disorders Association of America (ADAA). He currently chairs the National Depressive and Manic Depression Association (NDMDA) Scientific Advisory Board, and is President-elect of the American College of Neuropsychopharmacology. He is also a member of the Scientific Advisory Board of the National Association for Research in Schizophrenia and Affective Disorders (NARSAD).

Dr. Charney has published more than 500 original papers and chapters and is the editor of the journal *Biological Psychiatry*. The Institute of Scientific Information listed Dr. Charney among the top three most highly cited authors of psychiatric research in the decade 1990-2000.

Dr. Charney has been honored with numerous awards including the Efron award from the American College of Neuropsychopharmacology, the Anna Monika Foundation Award for Research in Affective Disorders, The Edward J. Sacher Award from Columbia University, the Edward A. Strecker Award from Pennsylvania Hospital and the University of Pennsylvania, the Gerald L. Klerman Lifetime Achievement Award from the National Depressive and Manic Depressive Association (NDMDA), and the American Psychiatric Association Award for Research. In 2000, Dr. Charney was elected to the Institute of Medicine.

Dr. Charney resides in Potomac, Maryland with his wife, Andrea, and their five children, Allison, Meredith, Lauren, Alexander, and Danielle.

Dr. Charney will be visiting the College of Medicine on Friday, October 25 to present his lecture. He is looking forward to sharing his experiences with faculty, staff, and students. ■



Alumni Profile

Paul B. Nelson, M.D., '72

by Lindy Hockersmith

"Penn State Proud." This saying resonates within the life, career and family of Paul B. Nelson, M.D., '72. Although currently residing in Indiana, Dr. Nelson continues to support and bring recognition to the University and College of Medicine through his numerous honors and endeavors.

Growing up in State College and born into a family of Penn State professors and alumni, Dr. Nelson "never considered any other place but Penn State." His father, Harold E. Nelson, was a professor in the Speech Department at Penn State and managed the student FM radio station and his mother took additional education courses at the University to enable her to work as a librarian in the State College school system. Add to that two sisters who graduated with degrees in education, two brothers-in-law and a nephew with undergraduate degrees and a wife who graduated with a degree in elementary education (all from Penn State) and one can easily see the powerful influence of the Penn State blue and white that connects his family.

For the past ten years, Dr. Nelson has been chairman and Betsy Barton Professor, Division of Neurological Surgery at Indiana University School of Medicine. He is also on the board of directors at Indiana University Surgical Associates and has appointments at seven hospitals in the Indianapolis area, including Indiana University Hospital and Riley Children's Hospital.

He received his B.S. degree in science from Penn State University and his M.D. degree from Penn State College of Medicine, where he was president of his freshman class. Nelson served a one-year internship in surgery followed by a one-year residency in emergency medicine at Penn State Milton S. Hershey Medical Center. However, Dr. Nelson soon discovered that his interests were more focused on neurology and neurosurgery, a training program that was not offered at the Medical Center. He relocated to Pittsburgh and completed his residency in neurosurgery at University of Pittsburgh School of Medicine. Subsequently, he began his career on the faculty at the University of Pittsburgh as the director of the Neurosurgery

Residency Program. At Pittsburgh, he became the vice-chairman of the Department of Neurological Surgery and the president of the medical staff at the Presbyterian University

Hospital. He was also a consulting physician for the University of Pittsburgh Athletic Department. Dr. Nelson remains an adjunct professor of Neurosurgical Surgery at the University of Pittsburgh School of Medicine.

Over the past 25 years, Dr. Nelson has received research grants totaling more than \$2 million and in 1999, he received a \$1 million grant for a spinal cord/head injury center. He was also presented with a Teacher Investigator Award while at the University of Pittsburgh. Last year Dr. Nelson was the proud recipient of the 2000 McElroy Award at the University of Pittsburgh School of Medicine's annual luncheon for the graduating class. This award is presented by the Medical Alumni Association to an outstanding non-alumnus who undertook residency training at the University of Pittsburgh Medical Center.

Dr. Nelson's major clinical and research interests include hyponatremia, pituitary disorders and spinal disorders. His current laboratory interests are directed toward trying to develop strategies to improve the outcome of patients with spinal cord injury. He is the member of twelve professional and scientific societies and is currently the secretary of the Neurosurgical Society of America. In addition, Dr. Nelson is a series editor for *Congress of Neurological Surgery* and *Concepts in Neurological Surgery*. He has given 70 presentations and lectures at national meetings throughout the United States and Canada and has authored or co-authored



REUNION WEEKEND DATES

nearly 60 publications and 40 abstracts throughout his career.

Dr. Nelson lives in Carmel, Indiana with his wife Teresa who also graduated from Penn State, taught school in Harrisburg and later taught piano in both Pittsburgh and Indianapolis. The Nelsons were married in 1970 and have three children, Benjamin, Jonathon and Jennifer.

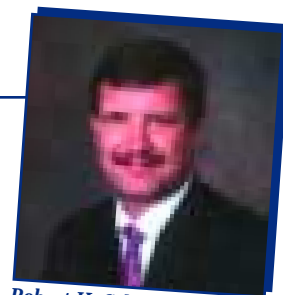
Dr. Nelson credits his success to the immense amount of support he receives from his family, staff and residents. He also attributes his passion for neurosurgery to several doctors who were inspirational in his development in this field, namely the College of Medicine's Dr. Robert Brennan and first chief of neurosurgery, Dr. Richard Bergland. Looking back over his career, he cites "patient care, training residents and helping students to become interested in neurosurgery" as the most rewarding aspects he has encountered. He is especially proud of the residency program at Indiana University where he began his career decades ago. In the last six years, Indiana University has ranked third in the country in placing students in neurosurgical training programs.

For Dr. Nelson, it is not the little moments that really stand out. Rather, it is the collective whole that really makes what he does worthwhile. For him, loving what you do is the most important criteria to being happy in your profession. "I don't have a single most memorable experience as a physician," says Nelson. "I like going to work every day. It has been a privilege for me to be a physician and to study and operate on the nervous system." ■

Penn State College of Medicine Reunion 2002 will be held at Penn State Milton S. Hershey Medical Center from Friday, October 25, through Sunday, October 27, 2002, for College of Medicine classes '72, '77, '82, '87, '92, and '97.

T I M E		E V E N T / L O C A T I O N
F R I D A Y , O C T O B E R 2 5		
8:00 a.m. - 11:15 a.m.		Alumni Society Board Meeting Executive Conference Room
10:15 a.m. - 1:00 p.m.		Alumni Campaign Committee Meeting Executive Conference Room
2:00 p.m. - 4:00 p.m.		Alumni Weekend Registration University Fitness Center
4:00 p.m.		Convocation Hospital Auditorium
7:00 p.m.		Individual Class Activities
S A T U R D A Y , O C T O B E R 2 6		
8:00 a.m. - 4:00 p.m.		University Fitness Center open to all alumni and families
8:00 a.m.		Registration for Continuing Education Program 1845 A&B
8:30 a.m. - noon		Continuing Education Program 1845 A&B
9:00 a.m.-11:00 a.m.		Alumni Weekend Registration University Fitness Center
noon - 3:00 p.m.		Bookstore will be open
1:00 - 3:00 p.m.		Tours of the Medical Center given by medical students Tours depart from the University Fitness Center every 30 minutes
6:00-7:00 p.m.		Cocktail Reception for Alumni, Faculty, Student Leaders Hershey Lodge & Convention Center Aztec Room
7:00 p.m.		Banquet for Alumni, Faculty, and Student Leaders Hershey Lodge & Convention Center Aztec Room
S U N D A Y , O C T O B E R 2 7		
11:00 a.m. - 12:30 p.m.		Brunch followed by Alumni Business Meeting The Hotel Hershey, Starlight Terrace

PENN STATE

Milton S. Hershey Medical Center
College of Medicine

Robert H. Schnarrs, M.D., '82

Dear Fellow Alumni:

As president of the Penn State College of Medicine Alumni Association, I had the distinct honor of welcoming 129 new fellow medical and graduate alumni into our Association at the 32nd annual College of Medicine Commencement on May 19. It was a day of pride for me—congratulating the Class of 2002—twenty years after my own graduation.

If you have not visited the College of Medicine campus in recent years, I urge you to do so. It is a technologically advanced institution with incredibly dedicated faculty, physicians, other staff and students. Most important, the College of Medicine is matriculating and retaining the best-qualified students from across the country. We all should be proud to welcome them into our profession.

I hope you, too, take pride in the education you received at Penn State Hershey. I think we all can agree that we received a top-notch education at Penn State College of Medicine. I hope you will join many of us who show our appreciation to the College of Medicine by supporting your Class Scholarship Fund. When these 129 new alumni walked across the stage at Commencement, 83 percent of them graduated with loans of some type. The mean debt load was \$108,086—an absolutely staggering figure when you're facing years of residency and fellowship. More than 57 percent of the Class of 2002 graduated with debt in excess of \$100,000; 17 percent with debt higher than \$150,000.

We all truly can make a difference in the lives of future physicians. Since awarding the first Alumni Association scholarship in 1994, more than 60 students have been recipients of Alumni Association Endowed, Class of 1971 and Class of 1975 scholarships. The Alumni Association stands firm in its commitment to one day fully endowing tuition for medical students. Yes, we have a long way to go, but with the support of everyone, this goal is not unattainable. On behalf of my colleagues on the Alumni Association Board of Directors and the Alumni Campaign Committee, thank you!

Appreciatively,

Robert H. Schnarrs, M.D., '82

CLASS SCHOLARSHIP FUNDS

Class of 1971	\$82,275.00
Class of 1972	\$9,200.00
Class of 1973	\$11,382.55
Class of 1974	\$21,442.40
Class of 1975	\$191,116.07
Class of 1976	\$5,776.41
Class of 1977	\$16,257.12
Class of 1978	\$10,866.50
Class of 1979	\$5,185.00
Class of 1980	\$16,257.12
Class of 1981	\$10,866.50
Class of 1982	\$9,327.19
Class of 1983	\$15,373.04
Class of 1984	\$15,270.27
Class of 1985	\$10,040.00
Class of 1986	\$3,646.09
Class of 1987	\$5,706.48
Class of 1988	\$3,600.00
Class of 1989	\$15,354.35
Class of 1990	\$4,852.11
Class of 1991	\$955.86
Class of 1992	\$2,846.18
Class of 1993	\$810.00
Class of 1994	\$1,727.03
Class of 1995	\$2,312.82
Class of 1996	\$6,820.88
Class of 1997	\$7,004.85
Class of 1998	\$7,247.31
Class of 1999	\$6,820.88
Class of 2000	\$772.79
Class of 2001	\$7,067.86
Class of 2004	\$150.00
Alumni Endowed	\$205,408.89
Graduate Alumni	\$28,165.10
MD/PhD Program	\$29,387.18
Total	\$770,997.69

'71	'72	'73	'74	'75
'76	'77	'78	'79	'80
'81	'82	'83	'84	'85
'86	'87	'88	'89	'90
'91	'92	'93	'94	'95
'96	'97	'98	'99	'00
'01	'04	Alumni Endowed	Graduate Alumni	MD/PhD Program

Fully Endowed Tuition for a Medical Student

Funded Scholarship >\$25,000

Partially Funded Scholarship

The Penn State College of Medicine Alumni Society Board of Directors established the Alumni Society Endowed Scholarship to help provide financial assistance to current medical and graduate students. A self-perpetuating fund, only interest earned from the endowment is used for the scholarship, preserving the principal to generate future growth. Since 1994, 84 scholarships have been awarded.

A scholarship has been established for each class, with the goal of raising the minimum of \$25,000 per fund to award a scholarship. (See chart at left.) In addition to the Alumni Society Award, the Class of 1971, Class of 1975, Graduate Alumni Award and MD/PhD Program Award will reward scholarships at Convocation in October 2002.

*This chart includes gifts received as of 5/31/02

The 2002 Penn State Interfraternity/Panhellenic Dance Marathon (THON™)

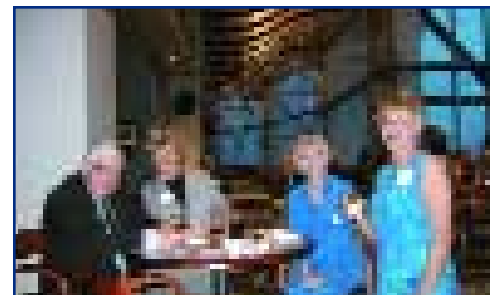
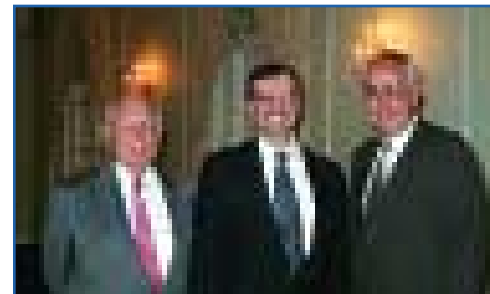
raised a record \$3,613,178.61 in February to benefit The Four Diamonds Fund at Penn State Children's Hospital. Nearly 700 Penn State University students participated in this largest student-run philanthropy in the nation, which calls for "No sleeping, no sitting, no kidding" for the full 48 hours. Since 1977, THON has contributed over \$20 million to The Four Diamonds Fund.

Children's Miracle Network at Penn State Children's Hospital raised a record-breaking \$1,702,602 to be allocated at Children's Hospital during June's CMN Celebration Telethon Broadcast on WGAL-TV8. Largest donors this year included Giant Food Stores, Wal-Mart and Sam's Club, Cat Country 106.7 fm, Hershey Foods employees, and Penn State Hershey Medical Center and College of Medicine employees. Since 1984, CMN has raised more than \$16 million at Penn State Children's Hospital.

Penn State College of Medicine alumni in the Wilkes-Barre/Scranton area gathered recently at The Westmoreland Club for an update on activities at the Medical Center and College of Medicine. Speakers included Dr. Darrell G. Kirch (senior vice president, dean and CEO), Dr. Robert C. Aber (vice dean for Academic Affairs) and Dr. John A. Waldhausen (Professor Emeritus of Surgery). Pictured are Dr. John A. Waldhausen, event host Dr. Dan F. Kopen, and Dr. Darrell G. Kirch.

Penn State College of Medicine alumni and friends of Penn State Hershey Medical Center joined Dr. Darrell Kirch in Beaver Stadium's Mount Nittany Club for an informational reception and tour of the stadium's new All Sports Museum. Attendees were greeted by special guests University President, Graham Spanier, and Nittany Lion Football Coach, Joe Paterno. ■

Greg Grieco, Intercom



 Cut along the dotted edge.

You can make a difference in a student's life. Today.

A gift of any amount to support the scholarship effort at Penn State College of Medicine can make a big difference. Won't you send your tax-deductible contribution today?

NAME: _____ CLASS YEAR: _____
 ADDRESS: _____ CITY: _____ STATE: _____ ZIP: _____
 EMAIL: _____ PHONE: _____

Enclosed is my gift of \$ _____

Please credit my gift to ☐ the Class of 19____ Scholarship Fund or ☐ for the following specific purpose _____

Honorary or Memorial Gifts

Check here if gift is: ☐ In honor of ☐ In memory of... _____

Your tax-deductible donation may be made payable to:

Penn State
 Office of University Development
 Penn State Milton S. Hershey Medical Center
 A120, P.O. Box 852, Hershey, PA 17033
 For more information, call (717) 531-8497

creating a legacy

Don and Ginny Cook have had a long association with Penn State. Don graduated in 1952 with a B.S. in Health and Human Development. In 1960, he received his master's degree in Higher Education in the College of Education. In 1952, Ginny received her B.S. in Elementary Education from the College of Education followed by her master's degree in 1960 in Health and Human Development.

In 1992, Don and Ginny Cook committed \$300,000 to support scholarships for medical students at Penn State College of Medicine—\$100,000 was pledged outright over five years, and \$200,000 was used to establish a charitable remainder unitrust.

As an irrevocable gift, the unitrust immediately provided them with a sizable income tax deduction based on their ages and their percentage of payout. Additionally, they elected to receive income at 6 percent of the trust assets valued annually. Since the unitrust is in both of their names, they together receive this income until they both pass away. At that point, the trust assets will pass to Penn State College of Medicine for scholarship support.

Penn State stands ready to work with donors to structure a gift so that it coincides with other financial plans and priorities. Gifts can be made to Penn State College of Medicine or Penn State Hershey Medical Center in a variety of ways. In addition to outright gifts of cash, securities, or real estate, planned gifts such as charitable trusts or annuities make excellent gifts. Planned gifts provide tax benefits in addition to life income. For more information on how you can include Penn State College of Medicine and Penn State Hershey Medical Center in your estate planning, please contact the Office of University Development at (717) 531-8497. ■

"One of the greatest needs we see is to help our students with their financial burden," says Don. "We continue to be concerned because many will graduate from medical school with debts of over \$100,000 and will enter residency programs where their salaries will be much less than what they owe."



Don & Ginny Cook

PENNSTATE



Milton S. Hershey Medical Center
College of Medicine

FINAL NOTE

“Our vision is to lead in the education of health professionals and scientists, the provision of patient-centered health care, and the discovery of biomedical knowledge.”

So reads the Penn State Milton S. Hershey Medical Center and Penn State College of Medicine Vision Statement—the picture of the future we are creating for ourselves. It’s an organization-wide commitment to be a global leader in all three of our vital institutional missions: medical education, patient care and research. These missions are co-dependent. By strengthening, growing and diversifying our research mission we support and enhance the others.

Through research: We find innovative ways of treating and preventing disease and injury, we educate and inspire further those who have made medicine their life’s pursuit, we improve the overall health of our community and nation, and we drive an economic engine based on the continued development of biotechnology, pharmaceuticals and medical devices.

As an organization, we have placed a renewed emphasis on the discovery of knowledge. Since July 2000, research funding has grown by fifty-two percent from \$54.5 million to more than \$83 million in Fiscal year 2001-02.

Our significant research growth can be attributed to the initiative, expertise and dedication of our excellent faculty scientists and research staff and a commitment by the University Administration and Trustees. This coalition is our greatest strength. Because we have the commitment of people and a focused strategy—I am confident the recent expansion of our research programs is only the beginning. Our goal is to double our current level of funding within seven years.

Even after our current research growth, we rank 64th out of 125 medical schools nationwide in extramural research funding. With a determined approach, we can and we will join the top third of all funded research centers in the nation in this decade.

We’ll start by collaborating more closely with our colleagues at University Park, with our friends and partners in the private sector and with government. In fact, some seeds have already been planted.

In April, Governor Mark Schweiker visited the College and Medical Center to announce a \$32.8 million state investment in the Life Sciences Greenhouse of Central Pennsylvania, a historic initiative to build on the biotechnology research at some of our state’s top universities, and to capitalize on the powerful economic potential of Pennsylvania’s status as a world center for life-science businesses. Penn State University, the College of Medicine and Medical Center are partnering with the Commonwealth, Lehigh University and private industry on the Central Pennsylvania Greenhouse initiative. This new initiative offers nearly limitless potential. Next spring we’ll host a science and technology Expo to showcase to the nation how we plan to expand our scientific and economic competitiveness.

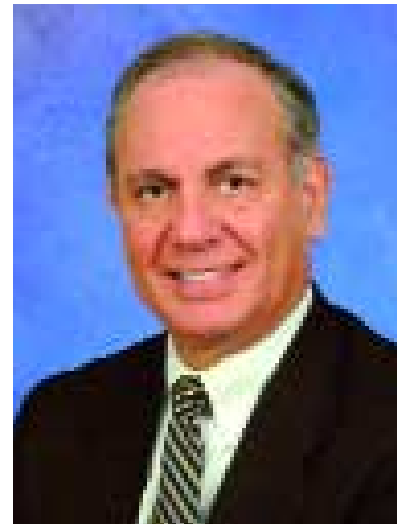
With the ongoing infusion of funds from the tobacco settlement funds (nearly \$8 million last year) we will continue to invest in key priorities such as cancer, core genetics and genomics research, the neurosciences and chronic diseases such as diabetes.

Never before has opportunity for research growth been so ripe. Be assured that we at Penn State College of Medicine and Penn State Milton S. Hershey Medical Center will take full advantage of these circumstances with the ultimate goal of making life better for the people we serve. ■



Jay Moskowitz, Ph.D.

Associate Vice-President for Health Sciences Research, Penn State University
Vice Dean for Research, Penn State College of Medicine



Jay Moskowitz, Ph.D.

“Our significant research growth can be attributed to the initiative, expertise and dedication of our excellent faculty scientists and research staff and a commitment by the University Administration and Trustees. This coalition is our greatest strength.”