PENNMedicine

APRIL 2005

Dealing with America the Super-Sized: Penn's Weight and Eating Disorders Program 'AN EXTRA SET OF EYES' IN THE ICUS A TRIO OF NEW INSTITUTES ANTIQUES ON DISPLAY

A No-Nonsense Approach to Eating Well

iet is one of those dangerous topics about which people feel strongly – often very strongly. Followers of carbohydrate-controlled diets may sneer at the adherents of the high-carbohydrate, low-fat schools of Ornish or Pritikin. Vegetarians may mock the Atkinites with the vehemence of true believers. As Gary D. Foster, Ph.D., clinical director of Penn's Weight and Eating Disorders Program, told The New York Times last year, when it comes to diet books, "evangelism creeps in" (22 February 2004). So I was a tiny bit concerned when Lisa Hark, Ph.D., R.D., a medical dietician for Penn's School of Medicine, came by to talk about her new book, Nutrition for Life: The No-Fad, No-Nonsense Approach to Eating Well and Reaching Your Healthy Weight (published by DK). If Hark turned out to be a zealot, I was making plans to bolt from my office.

I am happy to report that Hark was far from a zealot. She was enthusiastic and obviously eager to promote *Nutrition for Life*, written with Darwin Deen, M.D., of Albert Einstein College of Medicine – but she was refreshingly down to earth and very well-informed about the topic. Her history at Penn certainly lends her credibility.

In the early 1990s, supported by grants from the Howard Heinz Endowment and the National Cancer Institute, Hark and Gail Morrison, M.D. '71, G.M.E. '77, now vice dean for education, developed a program for teaching nutrition to Penn medical students. Unlike some other programs at the time, this one was detailed and extended over parts of three years. In 1996, *Medical Nutrition and Disease*, edited by Hark and Morrison, was published by Blackwell Science. The format they developed had already been tested in various dietetic, medical, and nursing programs. By the mid 1990s, more than 50 medical schools and teaching institutions were using the material, which was sold in a threering binder before its publication in book form. The third edition of Medical Nutrition and Disease appeared in 2003, filled with chapters written by many Penn experts. According to the editors, "Its integrated, case-based approach offers a complete perspective on the medical and nutritional implications of various clinical scenarios, with emphasis on management of disease and prevention."

Today, Hark continues as director of the School of Medicine's Nutrition Education and Prevention Program, which no doubt informs her new book. Yet it's also true that, as she puts it, "I'm a working mom, struggling with the same issues" that face her readers. She tries to make sure that her two children get healthy snacks, but she also knows that with all the temptations out there, it's a balancing act.

Elegantly designed, with plenty of colorful photographs, sidebars, charts, and the occasional "jargon buster," Nutrition for Life attempts to deliver as much as a reader can absorb. It begins with a section called "Assess your health and lifestyle," then follows with sections that provide basic information on food (fats, carbohydrates, fiber, vitamins, etc.); the elements of a healthy diet; eating appropriately for your age; weight control; "Food as Medicine"; buying, storing, and preparing food; and food analysis. Along the way, we can learn about the benefits and risk of drinking alcohol and read about ways to deal with lactose intolerance.

John Shea

The recipes sprinkled throughout range from spicy whole-grain pilaf to "nutrientdense" chicken noodle soup.

One section, Hark points out, "puts 45 of the most popular diets under the microscope," organizing them by type and by underlying theory and providing representative menus for each. Hark is particularly proud of the "Food as Medicine" section, which is aimed at preventing as well as treating nutritional problems. The recommendations, she notes, are evidence-based. In the section on digestive disorders, for example, she worked with experts in Penn's G.I. division as well as specialists in kidney disease and other fields. The entry on "Treating Constipation" gives an overview of the problem; recommends increasing one's intake of fiber and of fluids; and explains how magnesium-rich foods (spinach, almonds, raisins, etc.) and exercise can help.

"Where people are getting their nutrition information is the problem," she says. Consumers need "a credible resource." And according to Hark, many doctors lack authoritative information when it comes to talking to their patients about diet. *Nutrition for Life*, she believes, can help fill that gap.

It's clear that Hark and Deen view their book as something helpful for the long run, not as a guide for losing a few pounds quickly. On the matter of overweight, Hark appears not to blame carbohydrates or (by themselves) genes. "There's no question that people are eating too many calories."

That's largely the view of the professionals in Penn's Weight and Eating Disorders Program, too. You'll find a fuller account of that program's goals and achievements starting on p. 8.

In the meantime, I'm going to take Hark's advice and put my peanut butter aside while I try almond butter in my sandwiches. "It's healthier," she says.



| 8 | AMERICA THE SUPER-SIZED By Marie Gehret | Over the last four decades, Americans have become dramatically heavier, creating talk of "an epidemic of obesity." And it's not a matter of aesthetics – it's a matter of health. The professionals in Penn's Weight and Eating Disorders Program are studying the causes of this trend, evaluating the available treatments, and helping their patients lose weight in healthy fashion. |
|--------|---|---|
| Con-16 | PENN LAUNCHES ON-LINE CRITICAL CARE By Ed Federico and Sally Sapega | From four blocks away, specially trained physicians and nurses can monitor how patients are doing via a sophisti- cated and comprehensive telemedicine system. The goal is greater patient safety. As C. William Hanson, M.D., puts it, "It can't replace bedside care, but, as an extra set of eyes, it can help eliminate preventable medical mistakes." |
| 18 Ad- | INSTITUTIONAL ADVANCEMENTS By John Shea | Already a very friendly place for multidisciplinary centers and institutes, PENN Medicine has recently added three more institutes. They are expected to enhance the study and treatment of some major illnesses and disorders – and, in general, to enhance translational medicine at Penn. All three are meant to strengthen the interrela- tionships of research, patient care, and education. |
| | A GOOD KIND OF Ambition | For more than 40 years, the Philadelphia Antiques Show has been a major fund-raising event for the Hospital of the University of Pennsylvania and the University of Pennsylvania Health System. This year's loan exhibition is called "Vaulting Ambition: Gothic Revival in Philadel- phia, 1830-1860." Beginning with a preview gala on Friday, April 8, the show runs though Tuesday, April 12. |

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A Mark of Financial Health

n a university campus, receiving an "A" is great, but an "A" from Standard & Poor's Rating Services may be even better than most.

Earlier this year, Standard & Poor's assigned its "A" standard long-term rating to Pennsylvania Higher Education Facilities Authority bonds that were issued for the University of Pennsylvania Health System. In the course of restructuring its debt, much of it incurred during its rapid expansion in the mid-to-late 1990s, UPHS was able to sell about \$361 million in the insured bonds. According to the headline on the front page of *The Philadelphia Inquirer*, it was "Penn Health back in the pink" (February 2). The newspaper also noted that the bond issue was the first for UPHS since 1998.

Representatives from Standard & Poor's explained that the improved ratings reflected the Health System's "impressive operational track record" over the last four years and its "continued excellent reputation and position as one of the leading health-care systems in the Greater Philadelphia market affiliated with one of the most prestigious medical schools in the country." Liz Sweeney, a health-care analyst at Standard & Poor's, also noted that the Health System's sale of Phoenixville Hospital last summer to Community Health Systems had helped Penn strengthen its financial position.

Standard & Poor's wasn't the only bond-rating agency to notice the improved financial position of UPHS. Moody's Investors Service upgraded the Health System's outlook from "stable" to "positive."

According to Ralph W. Muller, CEO of Penn's Health System, "What you see here is a financial strategy that supports a very aggressive strategy to build clinical programs on a whole range of fronts. We have been one of the top five research centers in the nation over the last



The demolition process for the Commerce Museum (shown partway completed) and Convention Hall has been slow and deliberate.

decade, and this whole strategy is designed to make us one of the top five clinical centers as well."

Before Construction Comes Demolition

As the Health System moves forward in its plans for the Riverview Project, one of the major tasks has been to clear space for the first phase, the Center for Advanced Medicine. The future site of CAM is where the Commerce Museum and Convention Hall have stood. The Commerce Museum came down in February, and demolition is continuing on Convention Hall. The process has been slow and deliberate, and Douglas Aitken, project executive for CAM, said that the workers are hoping to recycle 60 to 75 percent of the building materials.

Keating Building Corporation was hired to oversee the abatement and demolition process. Before the demolition, all hazardous materials were carefully removed, following strict regulations. The demolition company, Mazzochi Wrecking, was responsible for taking down the remains of the World Trade Center. Much of the architectural grandeur of Convention Hall, both internal and external, has been saved. One of the more remarkable pieces removed from the building is the 8,000-pipe organ that dates back to the early 1930s. In addition, the CAM team worked with federal, state, and local historical agencies to photograph, identify, and preserve representative architectural elements, many of which will be incorporated into the new Center.

Construction on the Center for Advanced Medicine is scheduled to begin in the fall.

The Costs of Medical Education

From her vantage as vice dean for education at the School of Medicine, Gail



Morrison, M.D. '71, G.M.E. '77, can see at first hand that "a vicious circle of increasing tuition and student debt"

is threatening the future of medical education. That's how she put it in a brief "Perspective" in the 13 January 2005 issue of The New England Journal of Medicine. She asserts that the cost of obtaining a medical education "has been spiraling upward for the past 20 years" and "nothing has happened to change the alarming pattern."

Her figures are indeed alarming: the average tuition and fees during the 2003-2004 academic year were \$16,153 for public medical schools and \$32,588 for private schools. "Adding \$20,000 to \$25,000 for living expenses, books, and equipment brings the estimated cost of four years of attendance to about \$140,000 for public schools and \$225,000 for private schools."

Morrison notes that the tuitions have increased more rapidly than inflation for example, 17.7 percent for public medical schools and 5.7 percent for private medical schools in 2004. Although there are still two applicants for each medical-student position in the United States, applications have indeed decreased. What concerns Morrison more, however, is that, "for the past two decades, approximately 60 percent of medical students have come from families in the top quintile of income, with the bottom three quintiles together accounting for about 20 percent, arousing concern that medical education may be beyond the reach of students from middle-class and workingclass families."

Citing studies by the Institute of Medicine and the Association of American Medical Colleges, Morrison points out that the cost of attending medical school was the reason most often cited for not applying by underrepresented students; and 32 percent of students who graduated in 2002 indicated that their level of debt influenced their choice of specialty. (At Penn, Anne and Walter J. Gamble, M.D. '57, established the Twenty-first Century Endowed Scholars Program in the 1990s to make it easier for Penn medical students to consider the less lucrative specialties after graduation and to reduce the impact of debt as new M.D.s make their decisions.)

Given the financial difficulties facing government, where can one look for solutions? Morrison suggests that "our best hope" lies with the individual medical schools, which may find "creative ways to reduce the need for loans and to adjust financial policies so as to reduce tuition. Schools that can increase grants and scholarships and develop subsidized loan programs will be able to ameliorate their students' debt." Yet, as Morrison acknowledges, solutions of that sort depend on each school's ability to raise funds and increase endowments. She also points out that medical schools "must take another look at the costs of education and determine how to halt the rising cost of tuition."

Penn's School of Medicine is already taking that look, as the Admissions Office and the Development Office attempt to come up with imaginative solutions. See pp. 22-25 of this issue for a glimpse of some initiatives for raising scholarship support.

Orphans' Court Approves Sale

Last fall, the sale of Chestnut Hill HealthCare to a joint venture formed by the University of Pennsylvania Health System and Vanguard Health Systems, Inc., a for-profit system based in Nashville, Tenn., was approved by Chestnut Hill's board of trustees. That deal collapsed when Vanguard subsequently withdrew. In February, however, the Philadelphia Orphans' Court approved the sale to UPHS and a new partner, Community Health Systems, Inc.

A for-profit health system based in Brentwood, Tenn., Community Health is the same organization that bought Phoenixville Hospital from UPHS last year. Penn will be the minority partner, with a 15 percent stake. Community Health has agreed to pay \$25 million for the 183-bed Chestnut Hill Hospital and its network, which includes a rehabilitation hospital and an assisted-living facility. Community Health has also agreed to invest an estimated \$43 million for capital improvements to the Chestnut Hill network. Penn will have specialists located at the Chestnut Hill HealthCare sites, as it continues to have at Phoenixville Hospital.

U.S. Settles Gene Therapy Case

In February, more than five years after the death of Jesse Gelsinger in a gene therapy trial at the University of Pennsylvania, the United States Government reached civil settlements with three individual investigators and two of the institutions involved. The settlements cover alleged false statements and claims made between July 1998 and September 1999.

Gelsinger, 18 years old, was enrolled in a Phase I clinical trial seeking to develop an effective treatment for ornithine transcarbamylase (OTC) deficiency. OTC deficiency is an inherited disorder that, in its most common form, causes death in affected newborn males because they are unable to properly process nitrogen in food proteins, which results in too much ammonia in the blood. Gelsinger died on September 17, 1999, four days after being injected with a genetically engineered adenovirus carrying the OTC gene.

As part of the settlement, the University of Pennsylvania agreed to pay \$517,496 to the Federal Government to resolve its allegations, and the Children's National Medical Center, of Washington, D.C., agreed to pay the government \$514,622. In addition, the three named investigators – James M. Wilson, M.D., Ph.D., former director of Penn's Institute for Human Gene Therapy; Mark L. Batshaw, M.D., former professor of pediatrics, now at the Children's National Medical Center; and Steven E. Raper, M.D., associate professor of surgery, who headed the OTC study – will have restrictive controls on their clinical research activities. (*Almanac*, the publication of record of the University of Pennsylvania, has published the full restrictions: http://www.upenn.edu/ almanac/ volumes/v51/n21/gts.html.) According to the government, the restrictions on Wilson are more severe given his "pivotal role" as sponsor in the clinical trial in which Gelsinger participated.

"Perhaps most significant is the impact that these settlements will have on the way clinical research on human participants is conducted throughout the country," said Patrick L. Meehan, the United States Attorney who announced the settlement. "This action covers two major research centers which have instituted important changes in the conduct and monitoring of clinical research on human participants. We hope that these settlements will now serve as a model for similar research nationwide."

Among other allegations, the government alleged that the study had produced toxicities in humans that should have led the investigators to terminate the study, yet the study continued. It also alleged that reports submitted to the Food and Drug Administration, the National Institutes of Health, and to the institutional review boards charged with oversight of the OTC study misrepresented the actual clinical findings associated with the study. In addition, the government claimed that the consent form and process did not disclose all anticipated toxicities.

On the other hand, as set forth in the recent agreements, the University, the Children's National Medical Center, Wilson, Batshaw, and Raper do not admit to the government's allegations and contend that their conduct was at all times lawful and appropriate.

In Penn's case, it has already taken significant steps to make its clinical trials safer and to fulfill the agreements with the government. According to a Universi-

ty statement issued on February 9: "Today's announcement marks the conclusion of the federal investigation into events surrounding the unexpected death of Jesse Gelsinger, a participant in a gene therapy clinical trial at Penn. As this settlement recognizes, over the last five years Penn has established what is now a national model for the conduct of research, including the mandatory training of investigators and staff coupled with a comprehensive internal monitoring program for research involving volunteers. As part of the resolution of this matter, Penn faculty members Dr. James M. Wilson and Dr. Steven Raper may continue to make ongoing contributions to medical research. Out of this tragedy has come a renewed national effort to protect the safety of those who help to advance new treatments and cures through clinical research. As this investigation closes, we reaffirm our commitment to the safe conduct of research, strengthening our resolve to continue to set the highest standards possible in this important area." (One of the most visible actions taken by the University and PENN Medicine was creating the Office of Human Research.)

Wilson is prohibited from leading clinical research that involves human subjects until 2010. He may resume participation in studies involving human subjects before then if he undergoes additional training in such research and his work is independently monitored. According to the agreements, Wilson will lecture and write an article on the lessons learned from the OTC study. In a separate statement issued on February 9, he said: "In the last few years, I have focused my research on the discovery and design of new gene transfer vectors for gene therapy and genetic vaccines. Reaching this agreement means that I may continue to devote myself fully and without restriction to my laboratory research and that I may conduct clinical research when it

would be appropriate for scientific advancement."

Honors & Awards

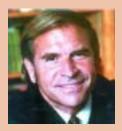
A "Hospital of Choice"

The Hospital of the University of Pennsylvania was one of about three dozen in the nation to earn a "Hospital of Choice" Award. The awards, presented by the American Alliance of Healthcare Providers, are designed to recognize hospitals "that go beyond their walls in pursuit of excellence and high-quality care" and have developed a collaborative relationship with physicians and health-care organizations in their communities.

The Alliance is a private stock corporation headquartered in Alexandria, Va. Founded in 1992, it seeks practical, effective, and efficient ways to improve patient care in the American health-care system.

The honored hospitals were rated on the Alliance's criteria in professional ethics, standards of conduct, patients' rights, performance management, staff development, and communication systems. Several of the hospitals receiving "Hospital of Choice" awards have also appeared in the "Honor Roll" published annually in U.S. News & World Report.

Judith A. Coche, Ph.D., clinical associate professor of psychology in psychiatry, was named a 2004 Woman of Distinction by the *Philadelphia Business Journal* and the National Association of Women Business Owners. Coche, one of 25 women honored, is founder of the Coche Center, one of the first non-medical mental-health practices on the East Coast owned by a woman. Co-author of *Powerful Wisdom*, a clinical research study of 192 distinguished female mental-health professionals, Coche has served as president of the Philadelphia Society of Clinical Psychologists. **Dwight L. Evans, M.D.**, the Ruth Meltzer Professor and Chair of the Department of Psychiatry, received the 2004 Award for Research in Mood Disorders,



presented by the American College of Psychiatrists. The award is given to a scholar or investigator who has made "exceptional

contributions to the treatment of mood disorders" and displayed excellence in research. According to Evans, "Depression has become the number one cause of disability within Western Europe and North America." In the United States alone, he said, about 20 million people suffer from serious depression.

Evans received a second honor recently when he was elected president of the American Foundation for Suicide Prevention. According to the foundation, in the United States, a person dies from suicide every 18 minutes; and suicide is the third-leading cause of death among 15to 24-year-olds and the second major cause of death among college students. Evans calls the foundation "uniquely positioned to help marshal the national forces necessary to address death from suicide as a major public health problem."

Edna B. Foa, Ph.D., professor of clinical psychology in the Department of Psychiatry, received an honorary degree from



the University of Basel in Switzerland in November. She was honored for her contributions to the understanding of the psychopathology and

to the treatment of anxiety disorders, with an emphasis on obsessive-compulsive disorder and post-traumatic stress disorder. Foa is director of Penn's Center for the Treatment and Study of Anxiety.

Steven L. Galetta, M.D., the Van Meter Professor of Neurology and Ophthalmology, received the Robert J. Glaser AOA Distinguished Teacher Award at the annual meeting of the Association of American Medical Colleges. The award, established by the Alpha Omega Alpha medical honor society, is presented in collaboration with the AAMC. There were four recipients in all for 2004. According to the AAMC, "Over the past 16 years, Dr. Galetta has won virtually every University of Pennsylvania teaching award for which he has been eligible. He is recognized by both medical students and residents as an outstanding teacher in the classroom and at the patient's bedside. Colleagues note his unselfish encouragement of students and residents to get involved in clinical research; students and trainees under his direction served as the primary-authors on more than half of his published research papers." Galetta heads the neuroophthalmology division and serves as director of neurological training.

Eli J. Glatstein, M.D., professor and vice chair of radiation oncology, was named one of three recipients of a 2004 Gold Medal from the American Society for Therapeutic Radiology and Oncology. The award honors his more than 35 years of service in the field of radiation oncology, including his pioneering work in the 1970s, at the National Cancer Center, when he successfully integrated different modalities of cancer treatment by combining radiation oncology with medical oncology. Glatstein, also a member of the University's Abramson Cancer Center, came to Penn in 1996.

Carl June, M.D., the professor of pathology and laboratory medicine in Penn's School of Medicine who serves as



director of translational research at the Abramson Cancer Center of the University of Pennsylvania, is one of two recipients of the first grant

awarded by the Alliance for Cancer Gene Therapy, Inc., for research in treating lymphoma and leukemia.

According to June, "We have recently developed a new strategy to create T cells that express a hybrid gene that endows the engineered T cells with the ability to specifically kill leukemia cells." With the grant, he plans to carry out a Phase I clinical trial in patients with advanced or recurrent leukemia who have not responded to prior chemotherapy.

June and his collaborator, **David Porter**, **M.D.**, associate professor of medicine, will receive about \$1 million over the next three to four years to use genetically engineered T cells to target leukemia and lymphomas. If properly activated, T cells have demonstrated a strong capacity to kill tumor cells.

Irwin B. Levitan, Ph.D., the David J. Mahoney Professor of Neurological Sciences who serves as chair of the Department of Neuroscience, was elected secretary of the Society for Neuroscience. The society is the world's largest organization of scientists devoted to the study of the brain. Levitan also serves as director of Penn's Mahoney Institute of Neurological Sciences.

Stephen A. Liebhaber, M.D., professor of genetics and of medicine, has received a Method to Extend Research in Time (M.E.R.I.T.) award from the National Heart, Lung, and Blood Institute. As the institute notes, the M.E.R.I.T. award "is designed to provide long-term, stable support to investigators whose research competence and productivity are distinctly

VitalSigns - h-h-h-h

superior, and who are likely to continue to perform in an outstanding manner." Liebhaber's work deals with genetic pathways that control the expression of the human globin genes, which encode the hemoglobin molecule that fills red blood cells and transports oxygen from the lungs to the tissues of the body. According to Liebhaber, "The hope is that by understanding how the information flow is regulated in human cells, it will be possible to understand the basis for a wide range of disease processes and to formulate approaches to therapy."

George A. Macones, M.D., associate professor of obstetrics and gynecology and of epidemiology in the School of



Medicine and director of maternal fetal medicine at HUP, has received a \$4.8 million grant from the Commonwealth of Pennsylvania to support a Cen-

ter of Excellence for Research in Pregnancy Outcomes. The grant was awarded by the Department of Health using funds from the Tobacco Settlement. According to the grant proposal, the University of Pennsylvania will collaborate with Pennsylvania Hospital, The Children's Hospital of Philadelphia, and Albert Einstein Medical Center to establish a multidisciplinary, randomized, controlled clinical trial to determine if screening and treating periodontal disease during pregnancy is warranted to reduce pre-term births.

Periodontal disease has been linked to pre-term birth in numerous epidemiological studies. The prevalence of periodontal disease is highest in under-served populations, with some estimates as high as 40-50 percent. As part of a four-year study, researchers will recruit 1,600 pregnant women from under-served areas in Philadelphia. Women with periodontal disease will be randomized either to scaling and root planing or to tooth polishing. A cohort of 700 women without periodontal disease will also be followed for comparison. The subjects will be followed to track spontaneous pre-term births. Researchers will also evaluate some of the mechanisms through which periodontal disease may exert its effect.

In addition to Macones, the other principal investigators are Marjorie Jeffcoat, D.M.D., dean of Penn's School of Dental Medicine, and Jerome F. Strauss III, M.D., Ph.D., director of the Center of Research for Reproduction

Charles P. O'Brien, M.D., Ph.D., vice chair of the Department of Psychiatry and director of the Center for Studies of Addiction at the School of Medicine and the Philadelphia Veterans Affairs Medical Center, was invited by the Academisch Medisch Centrum (Academic Medical Center) and the University of Amsterdam in Holland to present "The Anatomy Lesson." A tradition that dates back to the 16th century, the modern version of the Anatomy Lesson is a week-long event consisting of a presentation by an internationally prominent scientist on a subject on the cutting edge of science. O'Brien spoke about brain mechanisms of addiction and the development of new treatments for these disorders, based on work of his teams at the Department of Psychiatry and at the Philadelphia Veterans Affairs Medical Center, where he serves as director of psychiatric research. Thanking the people of Amsterdam for the honor, O'Brien noted that "Addiction is a modern problem facing the whole world. We all have the capacity to become addicted, and we are all affected by it in one way or another." O'Brien holds the Kenneth E. Appel Professorship of Psychiatry.

Ana Pujols-McKee, M.D., chief medical officer and associate executive director of Presbyterian Medical Center, was



one of seven women named Distinguished Daughters of Pennsylvania last fall. The awards were presented by Governor Edward

G. Rendell and Judge Marjorie O. Rendell, First Lady of the Commonwealth. "These seven women are committed to issues of importance in Pennsylvania, and their accomplishments and awareness will shape the future of our state," said Judge Rendell. Pujols-McKee was honored for promoting access to healthcare resources for all members of the community, particularly those in the West Philadelphia area. She has also served on the advisory committee of the Federal Drug Administration.

C. William Schwab, M.D., professor of surgery and chief of the division of trauma and surgical critical care at UPHS, has been elected president of the American Association for the Surgery of



Trauma. Under Schwab's leadership, Penn has become a Level I Regional Resource Trauma Center, recently recognized as a "model

program" for the nation. Founded in 1938, the association provides leadership and fosters advances in the surgery of trauma, serving as an intellectual forum for the exchange of knowledge pertaining to research, practice, and training in the surgery of trauma. Schwab is also director of the Firearm & Injury Center at Penn (FICAP).

Albert J. Stunkard, M.D., emeritus professor of psychiatry, was awarded the 2004 Rhoda and Bernard Sarnat International Prize in Mental Health by the In-

New to the Chairs

Joseph E. Bavaria, M.D., G.M.E. '90, vice chief of the division of cardiothoracic surgery at HUP, has been named the first Brooke Roberts-William Maul Measey Professor of Surgery. Larry Kaiser, M.D., chair of the department, noted that Bavaria "was integral to the initiation of the lung transplant program in 1991 and has achieved a national and international reputation for both himself and Penn with his unprecedented work in thoracic aortic surgery. Dr. Roberts, M.D. '43, G.M.E. '50, emeritus professor of surgery, died in 2003. According to Kaiser, Roberts "one of the pioneering vascular surgeons in this region."

Scott P. Bartlett, M.D., associate professor of surgery at Penn and a member of the Department of Pediatric Plastic and Reconstructive Surgery at The Chil-

stitute of Medicine. The Sarnat Prize is in recognition of the international scope and significance of Stunkard's contributions to psychiatry and mental health, particularly for his research on eating disorders. A pioneer in the field of psychosomatic medicine, Stunkard was the first to describe binge eating disorder and night eating syndrome and has spent more than 50 years conducting clinical research on these disorders. In the 1970s, he was instrumental in the development of behavioral therapy for obesity and anorexia nervosa; and in the 1980s he developed the most widely used questionnaire to assess the psychological aspects of eating behavior. A former chair of Penn's Department of Psychiatry, he was the founding director of the Weight and Eating Disorders Program.

The **United Community Clinics**, a community health clinic operated by stu-

dren's Hospital of Philadelphia, was appointed the first holder of the Mary Downs Endowed Chair in Craniofacial Treatment and Research at Children's Hospital. The chair has a term of ten years.

Jonathan A. Epstein, M.D., a professor in the cardiovascular division of the Department of Medicine and director of the Penn Molecular Cardiology Research Center, has been named the first recipient of the William Wikoff Smith Chair in Cardiovascular Research. It is supported by a gift from the W. W. Smith Charitable Trust. According to Michael S. Parmacek, M.D., chief of the division of cardiovascular medicine in the Department of Medicine, "Dr. Epstein is considered one of the top 10 investigators in molecular cardiology research in the world. This honor befits his talents and drive to find the causes of common forms of congenital heart disease."

dents from the University of Pennsylvania in the West Philadelphia neighborhood of East Parkside, has received a \$10,000 grant from the Dorothy V. Cassard Fund and the Children and Families Fund of The Philadelphia Foundation to support its expanding services and programs. According to Gauree Gupta, a Penn medical student and one of the medical coordinators of UCC, the funds would be used for health and social-service programs, medical supplies, community events, and other general program support. "With this grant, UCC will be able strengthen the quality and quantity of services needed by the East Parkside community. Students will receive the unique opportunity to learn more about responsive, responsible service for under-served communities."

UCC was started as a collaborative effort in 1996 by medical, nursing, and social work students from the University of Pennsylvania. The students have worked alongside members of the East Parkside community to develop an understanding of the community's needs and have provided free medical care, social services, and health education. Today, UCC serves over 600 patients per year. In the past year, the students have expanded services to include hypertension management, HIV/AIDS testing, eye care, and basic dental care.

Gupta herself was also honored last year as a 2004 Solvay Pharmaceuticals Student Research Fellow, administered by the Crohn's & Colitis Foundation of America. The fellowships are awarded to students who will perform full-time mentored research on inflammatory bowel disease. Under the supervision of James D. Lewis, M.D., M.S.C.E., assistant professor of medicine and of epidemiology, she is studying the association between IBD and multiple sclerosis.

A Chairman Departs

Effective March 31, 2005, **Gillies McKenna**, **M.D.**, **Ph.D.**, the Henry K. Pancoast Professor and Chair of the Department of Radiation Oncology, will step down as department chair. He has accepted a position as professor of radiation oncology and biology at Oxford University in England. He will also become director of the Gray Cancer Institute and director of the Radiation and Genome Stability Unit of the Medical Research Council.

McKenna joined Penn's faculty in 1987 and was appointed chair of the department in 1991. In that time, the number of full-time faculty has grown from eight to more than thirty; the number of patients treated per day has grown from about 100 to 300; and research funding to the department has grown from \$1.7 million in 1992 to \$9.6 in 2004. Among the clinical programs that have developed and thrived under McKenna's leadership is the Photodynamic Therapy Program.

America the Super-Sized By Marie Gebret

Tsai and Wadden, who is director of the Weight and Eating Disorders Program, found very few studies of the weight-reduction programs that fit their strict

As Americans become more obese, the professionals in Penn's Weight and Eating Disorders Program are studying the causes of this trend, evaluating available treatments, and helping their patients lose weight in healthy fashion.

t a session on the Penn campus last spring to discuss "The American Obsession with Weight Management," Robert I. Berkowitz, M.D., put it plainly: "We're really in a worldwide epidemic of obesity." That may be bad enough, but, Berkowitz added, the obesity comes with "all these myriad diseases," which can include diabetes, arthritis, sleep apnea, and respiratory and heart problems. Furthermore, there are no easy solutions or shortcuts to losing the extra weight, despite a multitude of competing books, programs, and experts, often with large advertising budgets. As Berkowitz put it, when it comes to dieting and losing weight, "most of what you see on TV is bogus."

If that's the case, what's a would-be dieter to do? Fortunately, two of Berkowitz's colleagues in Penn's Weight and Eating Disorders Program, Thomas A. Wadden, Ph.D., professor of psychiatry in psychology, and Adam Gilden Tsai, M.D., instructor of medicine, recently published a study in the Annals of Internal Medicine (4 January 2005) that evaluates Weight Watchers and several other major commercial diets and self-help weight-loss programs. The goal of the study was to provide physicians and their overweight patients with the first comprehensive review of these resources - without the hype. That such an approach was welcome was clear when The New York Times reported on it on the front page of its Tuesday "Science News" (4 January 2005).

scientific criteria. As they put it in the article, "Weight Watchers is the only weight-loss program whose efficacy has been demonstrated in a large, multi-site, randomized trial." Jenny Craig and L.A. Weight Loss, the other two largest non-medical commercial pro-



Berkowitz sees "a worldwide epidemic of obesity."

grams in the United States, did not have comparable studies. In the case of Weight Watchers, Tsai and Wadden found that its program "produces a loss of approximately 5% of initial weight, which may be sufficient to prevent or ameliorate weight-related health complications." On the other hand, the cost of Weight Watchers puts it out of reach of some people.

According to Tsai and Wadden, "Studies of OPTI-FAST and Health Management Resources, of which only 1 was a randomized trial, indicate that these programs included losses of approximately 15% to 25% of initial weights in persons who complete 3 to 6 months of treatment." They also noted that medically supervised programs like Health Management Resources are expensive, more than Weight Watchers – and that participants are likely to have a weight loss of between 8% to 9% after one year and 5% after four years. In addition, they wrote, those results "clearly represent a best-case scenario. They do not include the substantial percentage of persons who did not complete treatment or declined to participate in follow-up assessments."

Photography by Tommy Leonardi

Although scientific evidence was scarce when evaluating Internet-based weightloss plans and self-help programs, Tsai and Wadden believe they may have potential and they anticipate additional studies. And those kinds of programs are much less expensive. As Wadden told *USA Today*, "People need some social support to bolster them against our fattening environment. That's why sometimes it helps to join a program, because you have a counselor patting you on the back or other people encouraging you" (3 January 2005).

Tsai and Wadden ended their article in Annals by acknowledging that some healthcare providers might steer clear of ever recommending commercial or self-help programs because of the "clearly modest" evidence. As they put it, "such an assessment would not relieve providers of the need to assist patients with weight control. Neither practitioners nor their patients can afford to overlook the epidemic of obesity, with its profound health and economic consequences."

There's that phrase again: *epidemic of obesity*. Another Penn expert, Mitchell A. Lazar, M.D., director of the new Institute for Diabetes, Obesity, and Metabolism, echoed the phrase at the formal announcement of the institute in January when he said, "There is nothing funny about the obesity epidemic and the diabetes epidemic in the country and, in fact, in all industrialized societies" (see pp. 18-20). So what support is there for using this grim description?

Obesity has become so prevalent in the United States that many experts are calling it a major threat to public health. At the same time, the news media are saturated with idealistic standards of thinness and conflicting strategies for losing weight.

The prevalence of overweight and obesity has nearly tripled for adolescents over the past four decades, and overall obesity <text>

An advertisment from the 1920s.

rates are projected to double over the next 30 years. The increases in overweight and obesity cut across all age, racial, and ethnic groups, as well as both genders. From 1962 to 2000, the percentage of U.S. adults who are overweight or obese rose sharply from 45 percent to 64.5 percent.

Each year, Americans spend \$33 billion on weight-loss products, and the annual economic cost of obesity in this country is estimated to be \$75 billion to \$90 billion. Nearly 300,000 deaths are associated with obesity each year, and it is coming closer to overtaking smoking as the leading contributor to mortality.

What has caused this epidemic? There are many theories but few definitive answers: a growing genetic predisposition, carbohydrate-laden diets, super-sized portions of fast food and cola, sedentary lifestyles, or even the decade-long increase in high-fructose corn syrup, as proposed in a 2003 book? Does the primary responsibility for preventing obesity rest with the individuals – or with physicians, public health agents, nutritional and fitness experts, community leaders, schools, workplaces, urban planners, or food manufacturers and marketers?

While the debate rages on, many millions of Americans have taken matters in their own hands by joining the so-called Atkins Revolution and following low-carbohydrate diet plans. Meanwhile, according to *Consumer Reports* magazine, more than 1,000 low-carb versions of food products ranging from ice cream to beer have been introduced since December 2003. One low-carb alternative to Atkins, *The South Beach Diet* book, has sold more than 5 million copies alone.

To help sort out the claims and controversy, three of the leading researchers in Penn's Weight and Eating Disorders Program presented "America's Obsession With Weight Management" during last spring's Medical Alumni Weekend. In addition to Berkowitz, who is medical director of the program, the panelists were Albert J. Stunkard, M.D., emeritus director and founder of the program, and Gary D. Foster, Ph.D., clinical director of the program and professor of psychiatry.

These three panelists are only a few of the PENN Medicine physicians and scientists working on the problem of obesity, in several departments and divisions. A primary mission of the new Institute for Diabetes, Obesity, and Metabolism is to bring these people together more productively. The Weight and Eating Disorders Program, however, has been around for 45 years and is under the umbrella of the Department of Psychiatry.

Stunkard began the session by posing the question: How does psychiatry become involved in weight management?

Explaining that the root cause of obesity is generally considered to be 70 percent genetic and 30 percent environmental, Stunkard said that the condition comes down to two behaviors: overeating and exercising too little. The program, which uses a behavioral approach to understanding and treating obesity, has a dual clinical and research focus and is led by a multidisciplinary team of more than two dozen faculty and staff members who collectively have published more than 25 major papers on weight-related issues just since the early 1990s. Currently, there are at least eight different research studies under way, spanning the gamut of weight and eating topics: behavior modification and pharmacotherapy, low-carb diets, adolescent obesity, exercise, diabetes, and sleep apnea.

The program offers a variety of clinical services: individualized assessments in behavior and nutrition, group and individual therapy through the PENNSTART program, bariatric surgery, compulsive overeating treatment, long-term weight control, and other eating disorder treatment and referrals. The program strives to assess the causes of a patient's weight problem, determine its medical and psychological consequences, and then develop an appropriate plan.

As Stunkard noted, one way to get at the root cause of overweight and obesity is to understand the interaction between genes and environment. He referred to two authoritative studies on the topic: the first, which he led in the mid-1980s, followed 540 Danish twins who were adopted as infants and who, as adults, turned out to be very similar in size to their natural parents.

The other longitudinal study, on which he collaborated with Berkowitz, tracked 33 children of obese mothers and 37 children of thin mothers from birth to age 6. Strikingly, at age 6, 30 percent of the high-risk children had become overweight, with the most significant weight increase occurring between the ages of 4 and 6. In contrast, only one of the lowrisk children was classified as overweight by age 6. Stunkard said this points to a "strong genetic connection." The study, published in the January 2005 issue of American Journal of Clinical Nutrition, also shows evidence for the activation of body weight genes at different age intervals.

erhaps as complex as the geneticenvironment connection is the design and evaluation of treatment programs for obese patients. Berkowitz, who last year was

appointed the Frederick H. Allen Chair of Child and Adolescent Psychiatry at The Children's Hospital of Philadelphia as well as executive director of its Behavioral Health Center, has conducted extensive research on the efficacy and safety of different modes of treatment for obesity. He explained that the type of obesity treatment selected often corresponds to patients' body mass index (BMI). BMI is a measure of a person's weight relative to his height and waist circumference.

An Overview on Overweight With Thomas A.

Is it possible to pinpoint the exact cause(s) of an individual person's overweight (i.e., genetic vs. environmental, physiological vs. emotional)?

In the vast majority of cases, multiple factors interact to cause overweight. Persons with a genetic predisposition toward obesity will achieve the highest weight in countries such as the U.S. Our culture explicitly encourages consumption of supersized portions of high-fat and high-sugar foods. Similarly, our environment implicitly discourages physical activity. The same person who is overweight in America might be average weight in a developing country, simply because the lifestyle is not present to support obesity. The dramatic increase in obesity over the past 25 years can only be explained by changes in our environment (eating and activity habits). The gene pool certainly hasn't changed during that time.

Persons with a history of depression are predisposed to gain weight. Those who gain the most, however, probably have a predisposition to obesity or live in



Tom Wadden: a moment of truth?

a society which implicitly encourages people to eat in response to negative emotions. In America, we are encouraged to eat in response to all emotions – whether happy or sad.

How powerful is psychology in the prevention and treatment of weight management? Can an obese person ever be "cured" of obesity?

I think the environment is far more

Normal BMI is considered from 18.5 to 24.9. For patients ranging from 25 to 29.9, the treatment followed by the Weight and Eating Disorders Program is diet, exercise, and behavior. For those with a BMI greater than 30 (or in the 27-29 range with other risk factors), the treatment is pharmacotherapy. And for those with a BMI greater than 40 (or greater than 35 if they have an obesity-related disease), the treatment is surgery. (See *Penn Medicine*, Spring 2004, for an article on Penn's bariatric surgery program.)

Penn's Weight and Eating Disorders Program considers it a success when a person loses 5 to 10 percent of his body weight. In theory, that is the amount of weight loss that is necessary to improve blood pressure, blood glucose levels, and cholesterol levels.

With behavior modification, which usually focuses on changing eating habits and increasing exercise regimens, patients do "pretty well," Berkowitz said. Behavioral treatment generally results in a mean weight loss of 9 to 14 percent at the end of one year.

In comparison, Berkowitz said that patients undergoing pharmacologic therapy average a 7 to 10 percent mean loss after one year. "It's not much different than the usual treatment, but it may be different people responding to different treatments," he pointed out. With both types of treatment, he said that associated health problems – such as lipids, blood pressure, and sleep apnea – improved.

About 40 percent of patients who take weight-loss medications can achieve and maintain a fairly good weight loss, particularly when they follow behavior modification that is designed to improve their eating habits and emphasize exercise.

Berkowitz indicated that the gastrointestinal drug Xenical (Orlistat), which blocks the body's absorption of fat, prevents about 30 percent of consumed fats from being digested and results in an average weight loss of 8 percent. Side effects are generally restricted to gastrointestinal discomfort and complications,

Wadden, Ph.D., Director of Penn's Weight and Eating Disorders Program

important than psychology for preventing and treating obesity. We need to create environments that make it easier for people to make healthy eating and activity choices. This includes putting physical activity back into our schools and work places and providing healthier food choices. Currently, people have to swim against the tide to make healthy eating and activity choices. For many people, that requires an enormous amount of effort.

Psychology places the emphasis on the individual's need to make appropriate (healthy) choices, when surrounded by so many poor choices. A public health approach to obesity prevention would introduce new policies that would create a healthier environment, thus making it easier to adopt a healthy lifestyle. Dr. Phil's approach to weight management, while engaging, is not going to stop the obesity epidemic. It focuses too much on individual responsibility and not enough on public policy.

Few people are cured of obesity, if that

means never having to worry about their weight management. That's true even with persons who have had bariatric surgery. They must continue to focus on their diet and physical activity. Maintaining a significant weight loss is virtually a part-time job for most people, given the need to exercise about an hour a day and to eat a low-calorie diet.

Are people too concerned with their actual weight number? Should we be concentrating more on other metrics?

As a nation, Americans have not been concerned enough about the numbers on the bathroom scale. Sixty-five percent of us are overweight or obese. So, most people need to pay *more* attention to the scale to prevent the development of overweight and obesity.

Some individuals have difficulty losing weight, despite their best efforts. They should focus on increasing their physical activity. Several studies suggest that physical fitness protects people against the health risks of excess weight. So, for people who have lost and regained weight repeatedly, I suggest that they focus on increasing their activity, eating a healthy diet, and obtaining regular medical care. They may end up being healthier than lean individuals with a sedentary lifestyle.

Given some of the recent low-carb research conducted by Gary Foster and other researchers, do you think the Food Guide Pyramid needs revamping? What evidence would be needed to make a compelling case for changing the guide?

I think components of the Food Guide Pyramid need to be reconsidered. Not all fats are bad. People clearly should avoid saturated fats in favor of mono- or polyunsaturated fats. In addition, not all carbs are created equal. Fruits and vegetables should be freely consumed, as should high-fiber foods. But we could certainly cut down on our servings of white bread and Philly pretzels. — Marie Gehret which can be reasonably managed with a low-fat diet.

Researchers studying obesity, Berkowitz said, are learning more about the parts of the brain involved in appetite, including the thalamus, hypothalamus, and pituitary gland. From a pharmacologic perspective, medications that block neurotransmitters in the brain and the re-uptake of the chemical serotonin – such as the drug sibutramine (Meridia) – have been successful in treating classic psychological disorders like depression and anxiety and, more recently, in helping weight loss.

Berkowitz and Wadden are co-authors of the study "Behavior Therapy and Sibutramine for the Treatment of Adolescent Obesity," which was published in The Journal of the American Medical Association (JAMA) in 2003. The randomized, doubleblind, placebo-controlled trial included 82 adolescents ranging in age from 13 to 17, with a BMI of 32 to 44. For the first six months of the trial, participants received either behavior therapy and sibutramine or behavior therapy and placebo. For the next five months, all participants received sibutramine in an open-label treatment. At six months, the behavior therapy and sibutramine group experienced greater mean weight loss (17.2 pounds vs. 7 pounds in the control group) and an 8.5 percent reduction in BMI (compared to 4 percent in the other group) and reported greater reductions in hunger. From months seven through 12, adolescents who continued to use the medication gained an average of 1.8 pounds, whereas those who switched from placebo to sibutramine lost an additional 2.9 pounds. In all, about 40 percent of the adolescents lost 10 percent or more of their starting weight.

While reporting the success of sibutramine, Berkowitz cautioned that weightloss medications should be used in adolescents and children only on an experimental basis until additional safety and efficacy data are available. Yet he also suggests that "medication is likely of greatest benefit for long-term maintenance" and to improve lipid levels and other health outcomes. He also mentioned that several new weight-loss medications are expected to hit the market soon, and numerous clinical trials are under way.

iven the widespread popularity of the Atkins Diet and other low-carbohydrate diets, it is not surprising that researchers in Penn's Weight and Eating Disorders have investigated them. According to *The American Heritage Stedman's Medical Dictionary*, "carbohydrate" defines "Any of a group of organic compounds that includes sugars, starches, celluloses, and gums and serves as a major energy source in the diet of animals." Of course, this definition cannot explain the fanaticism with which some people have sought to reduce carbohydrates in their diet.

At the weight-management symposium, Gary Foster was quick to dispute three claims that the Atkins group and other anti-carb camps often make about carbohydrates:

Carbs increase hunger – This has not been scientifically proven, Foster noted;
Carbs increase insulin – They should, he said, temporarily;

3. *Carbs are addictive* – "I have seen no scientific evidence to suggest that carbohydrates are addictive," said Foster. "They are certainly not addictive in the classical sense. There is no physiological evidence such as tolerance or withdrawal."

To be fair, Atkins Nutritionals, Inc., discriminates among carbohydrates. Atkins claims that *highly refined* carbohydrates – white breads, cookies, chips, soft drinks, and sweets – are responsible for the "sugar roller coaster" that occurs upon consuming these rapidly digested, blood-sugar-spiking products. After years of overconsuming carbohydrates, Atkins Nutritionals says, the body's insulin response can be impaired, causing hypoglycemia in the short term and diabetes in the long term. Atkins supporters also contend that low-carb diets enhance ketosis, which is essentially the body's "fat metabolism." The premise is that the ketosis process prevents fat from being stored in the body and, instead, is burned for fuel.

In fact, it was claims about ketosis that got Foster interested in the topic – the idea that it enables people "to eat all you want and not count calories," which directly contradicted what he had spent "most of my adult life counseling people." Resolved to set the record straight, Foster and his research team conducted the first randomized, controlled study of the Atkins Diet.

According to Foster, only two studies other than his own had been published comparing the effectiveness of low-carbohydrate and calorie-restricted low-fat diets. One, published in *The Journal of Clinical Endocrinology and Metabolism* in 2003, indicated that the low-carb group experienced greater weight loss, lower triglycerides, and lower LDL (bad) cholesterol but, interestingly, there was no relationship between weight loss and ketones.

The other study, led by Frederick Samaha, M.D., assistant professor of medicine at Penn, was published in The New England Journal of Medicine in May 2003 (ironically, in the same issue as Foster's groundbreaking study). Samaha's group reported similar findings. For six months, Samaha and his colleagues at the Philadelphia Veterans Affairs Medical Center (where he is chief of the cardiovascular division) studied 132 patients who were an average age of 53 years and weighed an average of 288 pounds. Their patient groups consisted of a high male population with several co-morbidities. Among the low-carb dieters, weight loss was greater (18.5 pounds vs. nine pounds),



Gary Foster, flanked by two associates from the Weight and Eating Disorders Program: Angie Makris, P.h.D., R.D. (left), and Brooke Bailer, M.S.

triglycerides were significantly lower, and they experienced improvements in insulin sensitivity compared to the low-calorie dieters.

Foster's one-year, three-center study examined 63 participants (predominantly women) who were an average age of 44 years, weighed an average of 216 pounds, and had an average BMI of 33. Penn was the lead center in the study, which also included researchers at the University of Colorado and Washington University.

As Foster explained, the study was designed to have a "self-help" approach. The Atkins dieters were given a copy of Dr. Atkins' New Diet Revolution and asked to follow the diet, which includes a carb restriction of 20 grams in the first two weeks with incremental increases in subsequent weeks, as outlined in the book. The conventional diet group was prescribed to follow diets of 1,200-1,500 calories a day for women and 1,500-1,800 calories daily for men, which consisted of 60 percent carbs, 25 percent fat, and 15 percent protein, as based on the U.S. Department of Agriculture's Food Guide Pyramid.

At three months, Atkins participants lost an average of 14.7 pounds compared with 5.8 pounds in the conventional group. At six months, Atkins patients had lost 15.2 pounds versus 6.9 pounds and, at 12 months, 9.5 pounds versus 5.4. Overall, Atkins participants had greater increases in HDL cholesterol (18 percent vs. 3 percent) and greater reductions in triglycerides (-28 percent vs. 1 percent). However, neither group showed significant changes in LDL cholesterol or in insulin sensitivity.

Overall, the study revealed that lowcarbohydrate diets may be more effective and less harmful than most experts anticipated. The Atkins results are "encouraging but preliminary," said Foster, whose article in *NEJM* garnered significant attention in both medical and media circles. Yet he also noted that there are limitations of the literature, an absence of long-term results, limited clinical assessments, and a lack of behavioral treatment because his study used a self-help approach.

Unable to explain the increase in HDL under the Atkins plan, Foster is absolutely certain why the diet resulted in greater short-term weight loss. "It was calories."

Contrary to popular belief, Atkins dieters are not permitted to eat all of the fat they want in a day. Research has repeatedly shown that low-carb dieters lose their weight the old-fashioned way: by ingesting fewer total calories.

"It's energy in, energy out," Foster explained. "At the end of the day, it comes down to the number of calories you eat – that's in terms of pure weight loss, not health outcomes." He also mentioned that the only way to credibly evaluate the effects of carbohydrate and caloric intake is to conduct a metabolic ward study. "This cannot be done on an outpatient basis," he emphasized, because people cannot accurately remember what they eat and generally don't follow instructions well.

"It should get our attention as clinicians that when we ask [patients] to count carbohydrates, they actually consume fewer calories than when we tell them to count calories."

For diabetics in particular, nutritional planning requires strict attention to food choices, carbohydrate servings, and portion sizes. Attuned to this matter and the direct link between obesity and diabetes (the Centers for Disease Control and Prevention project that one in three Americans born in the year 2000 will eventually develop adult-onset diabetes primarily due to obesity), Thomas Wadden is participating in a 16-site "lifestyle intervention" for overweight men and women with type 2 diabetes, funded by the N.I.H. Researchers already know that when diabetics lose weight, they tend to become healthier and require less medication.

In the May 2004 issue of Annals of Internal Medicine, doctors Linda Stern and Frederick Samaha at the Philadelphia V.A. published a one-year follow-up of the earlier study. The second study found no statistical difference in the overall weight loss in the two groups (low-carb dieters and low-calorie dieters) after one year. They lost an average of 10 to 16 pounds from their original weight - and more than a third of patients in both groups dropped out. In all of the recent studies, cholesterol levels improved in both low-carb and low-calorie diets, but triglyceride levels were considerably lower in Atkins, suggesting that risk of heart disease could actually be reduced when fat is included in the diet and starches and fine carbs are eliminated. Longer-term weight maintenance under

Atkins, however, is on par with conventional diets.

For now, more compelling, long-term evidence is necessary to convince most nutritionists, researchers, and physicians. Foster is one of the skeptics. At this point, he said, "I'm not convinced that Atkins is the diet that all obese Americans should be on. I would need at least two years' worth of credible data and measures of bone, kidney, and lipids." He also added that the potential long-term effects of low-carb diets on dieters' cancer risk are not known and are a "real concern."

For Foster, the main issue is whether these diet approaches help patients maintain their weight loss better than conventional approaches and whether patients sustain better lipid levels and other health outcomes during weight loss and weight maintenance.

Foster is currently leading another three-center study with his colleagues at the University of Colorado and Washington University to further examine lowcarbohydrate and low-calorie diets. Funded by the N.I.H., this comprehensive study spans five years and includes 360 patients. Not only does Foster hope to collect more definitive data, he would like to explore more individual responses to the diets.

With the jury still out on the longterm safety and effectiveness of low-carb and low-glycemic plans, Penn's Weight and Eating Disorders Program is not prepared to abandon conventional clinical practices or the Food Guide Pyramid just yet. Indeed, Wadden adds reason and practicality to the debate: He believes that the most useful approach for dieters is to "consume a diet of foods that [they] like, but to reduce sizes."

> s physicians continue to investigate – and disagree – and consumers continue to count carbs, the fact remains that more than 200 million American adults

and children are overweight or obese. Researchers like Foster don't believe all of them gained weight because of carbohydrate "addiction." For Berkowitz, however, the startling rates of childhood obesity can be explained rather simply. "Kids and inactivity and high amounts of junk food are a formula for disaster," he said. He believes that food manufacturers need to take more responsibility in marketing their high-fat, high-sodium, high-calorie products, and that parents must do their part to promote "healthy living."

According to the National Institute of Diabetes and Digestive and Kidney Diseases, nearly 40 percent of young people (ages 12-21) report getting no or very little recent physical activity, and less than one-third of adults get regular leisure-time physical activity (defined as light or moderate physical activity five times or more per week for 30 minutes). Moreover,

Night

Albert J. Stunkard, M.D., founding director of Penn's Weight and Eating Disorders Program and a former chair of the Department of Psychiatry, has many achievements to his credit. Now an emeritus professor, he continues to do research and

publish his findings. His most recent book is Overcoming Night Eating Syndrome: A Step-by-Step Guide to Breaking the Cycle (New Harbinger Publications, Inc. 2004), written with Kelly C. Allison, Ph.D., a clinical psychologist who directs Penn's Night Eating Study, and Sara L. Thier. At last May's symposium on "America's Obsession with Weight Management," Stunkard presented the gist of the new book. It draws from leading research on the disorder, including the 2004 Penn study "Clinical Characteristics of the Night Eating Syndrome: Findings From a Controlled Study," which Allison and Stunkard conducted with John P. O'Reardon, M.D., assistant professor of psychiatry, and David F. Dinges, Ph.D., professor of psychiatry and chief of the section on sleep and chronobiology. In all, they have



Albert Stunkard considers a full-bodied figure of long ago.

studied more than 140 NES and control patients combined.

First described by Stunkard in 1955, NES is a stress-related eating disorder that is associated with disrupted sleep, inconsistent moods, and disordered neuroendocrine function. It affects an estimated 1.5 percent of the general population, 9 to 15 percent of obese patients seen in clinics, and 28 percent or more of severely obese patients, many of whom have been evaluated for surgical treatment. NES can afflict both men and women, and men represent more than 40 percent of all night eaters – an interesting gender trend that differs from many other eating disorders, such as anorexia and bulimia, which overwhelmingly affect women.

Night eaters often skip breakfast and

researchers at the Harvard School of Public Health have found, based on the Nurses' Health Study, that about 30 percent of new cases of obesity and 43 percent of new cases of diabetes could be prevented if people adopted a relatively active lifestyle, including walking briskly for at least 30 minutes a day and watching television for less than 10 hours a week.

Setting themselves against these unhealthy patterns of inactivity, Thomas Wadden is examining the benefits of a structured exercise program for the treatment of overweight; Gary Foster is looking at the effects of a two-year schoolbased obesity prevention (nutrition and exercise) program on the prevalence of obesity among middle-school children in Philadelphia; and Robert Berkowitz is continuing to study adolescent obesity as part of an N.I.H. grant.

"We must take a public health ap-

Eating Syndrome

wait until the afternoon to eat for the first time. Typically, their interest in food returns at dinnertime, when they tend to consume large meals and continue eating into the night. Then, having trouble falling asleep, they wake up shortly after falling asleep and a few times thereafter. "These awakenings are quite fascinating," said Stunkard. "People awake, eat, and go back to sleep within 20 minutes."

Stunkard maintains that night eating leads to obesity in patients – not the reverse. In the Penn study, approximately half of all overweight night eaters were of normal weight before they started night eating. He also points out that depression is common among night eaters, and 45 percent of NES patients in the Penn study had a major bout of depression sometime in their lives. In night eaters, depression appears to worsen as the night progresses; as Stunkard put it, this finding is "very striking because most forms of depression show improvement in the evening."

Based on their research, Penn researchers have discovered that NES is a familial disorder. They found that 17 percent of all first-degree relatives (parents, siblings, children) of NES patients were also affected with the disorder, while only 5 percent of first-degree family members of the controls were affected. Still, Stunkard contends that the interaction between genes and environment that occurs with obesity and any behavioral disorder is also true for NES. For example, he noted that social class, which has a strong environmental influence on obesity, can have a notable impact on NES as well. The stressful environments often associated with low social class can provide the stimulus for night eating in those who are genetically vulnerable.

According to Stunkard, individualized cognitive therapy can help patients take control of their dysfunctional thoughts. Another promising treatment involves sertraline (Zoloft). In a 12-week open-label trial of sertraline vs. placebo, which O'Reardon published with Stunkard and Allison in the January 2004 issue of the International Journal of Eating Disorders, the total nighttime awakenings of NES patients decreased by more than 50 percent. In addition, their snacking after awakening was reduced by two-thirds and the total number of calories consumed after dinner dropped by 50 percent. Stunkard indicated that a current doubleblind trial of sertraline with 28 patients is showing "very strong results." - M. G.

proach," Berkowitz argued. "As people get heavier and heavier, their risk for premature death goes up, and I think this is the reason why we should all be concerned about obesity."

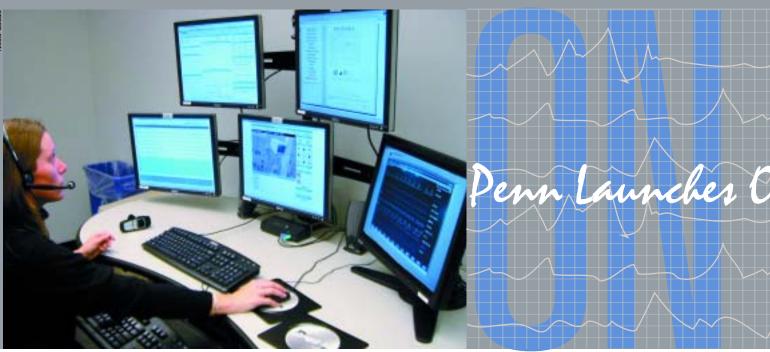
For its part, Health and Human Services announced in July 2004, on the heels of unveiling its calorie-counting strategy, a change in Medicare and Medicaid policy manuals that would allow for the reimbursement of some obesity-related medical expenses. HHS ruled that certain obesity-related conditions should be covered by medical insurance, although the department was not ready to classify obesity as a "disease."

According to Wadden, one of the difficulties in maintaining weight loss comes down to dieters' expectations. During the dieting phase, dieters are encouraged and reinforced by seeing the physical change in their bodies and by receiving compliments from family and friends. During the maintenance period, however, these reinforcements cease, so they must find rewards in other ways. In addition, fat cells never completely disappear, only shrink, after weight loss, which could mean that dieters are never totally able to achieve the body of their dreams.

It is important "to underscore how desperate overweight people are to lose weight," Foster said, "and it's not because of their failure or because of some moral flaw. It's because our treatments are largely ineffective in the long term, short of surgery. I think we have to acknowledge that . . . and we need to start thinking about multiple treatments."

And while some experts like Wadden consider it better to have lost and regained than not to have lost at all, the fact remains that obese Americans need the proper help and guidance – and validation.

"I think there's really a bias against obesity as a disease," Berkowitz insisted during an interview on National Public Radio. "Obesity is as real a disease as any other."



Screens galore: Heather Smith, R.N., at the workstation.

ach year, almost five million patients are admitted to intensive care units in the United States, and more than 500,000 of these patients die. Studies reveal that at least one in ten patients who die in ICUs every day would survive if intensivists – physicians who are board-certified in critical-care medicine – were present in the ICU and managing their care.

Providing this level of expertise and knowledge around the clock electronically is the next step in the University of Pennsylvania Health System's commitment to improve patient care. In November, it launched Penn E-lert, which permits coverage of ICUs that is, paradoxically, both remote and "live." The eICU technology, a patented product of Baltimore's VISICU, Inc., enables critical-care intensivists to cover their patients through a comprehensive telemedicine system that includes early-warning software, order entry, clinical decision support, electronic documentation, and remote physiologic monitoring. Like an airtraffic control center, the system provides assistance and guidance to the attending doctors, residents, and nurses in the hospital ICUs.

"This new initiative brings UPHS to

the forefront of cutting-edge technology focused on quality and patient care," says *C*. William Hanson III, M.D., the professor of anesthesia who serves as medical director of the Penn E-lert program. "We'll set the mark on how to bring ICU care into the future, while at the same time enhancing patient care."

Penn E-lert has gone "live" in ICUs at the Hospital of the University of Pennsylvania and, for a brief testing period, at Pennsylvania Hospital. The system is expected to cover all adult ICU beds in the Health System, including those at Presbyterian Medical Center, within 24 months. UPHS is the first health system in the Pennsylvania, New Jersey, and Delaware area to go live with this new technology.

"UPHS has already made a significant commitment to implement evidencebased medicine to assure the highestquality and safest care," says Patrick J. Brennan, M.D., professor of medicine and chief of Health-care Quality and Patient Safety for UPHS. "This new technology provides us with an opportunity to take patient safety and quality to the next level."

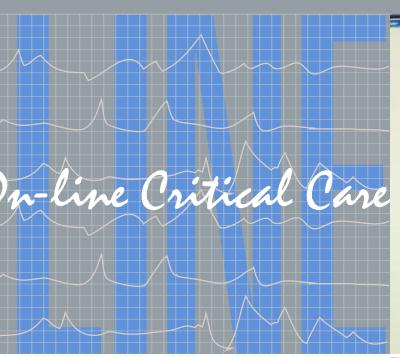
Part of that commitment, of course, is financial. According to Hanson, Penn's Health System has spent close to \$3 million for the technology at HUP and Pennsylvania Hospital, and Presbyterian Medical Center will be brought on line in the next several months using additional funding.

A New Level of Care

enn E-lert features real-time data, audio, and video monitoring of ICU patients from one central command center – seven days a week, 365 days per year. Located in a suite at 3440 Market Street, the command center is at least four blocks away from the patient beds it is monitoring. The aim of the center is to supplement the on-site care provided in the ICUs by critical-care doctors and nurses, especially during off hours, such as nights and weekends.

Currently, the command center houses two workstations that Hanson says are capable of covering the approximately 120 ICU beds at the three hospitals. According to Hanson, "One intensivist and two criticalcare nurses will cover between 50 and 75 beds remotely."

Each work station comprises five screens. One displays the patient's medical record, another has bedside monitor information, and a third offers access to hospital information, such as Sunrise or Navicare. An-





The Penn E-lert screen shows a patient's room.

other is a "smart" alert system that tracks a patient's condition based on vital signs, test and lab results, and imaging information. "The limitation with physiologic monitoring is that it gives a five-second window of data, not a trend," Hanson explains. "This system combines all the data and provides evidence-based recommendations."

While Penn E-lert provides constant vigilance via these information screens, the system also has an audio/video screen that provides visual access to the patient's room. According to Heather Smith, R.N., the operations manager of Penn E-lert, "we can 'camera-in' with the speaker off to do an assessment without disturbing the patient."

The patient automatically knows when the camera is "on" because it turns to face the patient's bed. An audio signal – sounding like a door bell – also alerts both the patient and the health-care provider that the camera is on.

The staff in the ICUs can just as easily communicate with the command center. A dedicated phone line and an e-ICU button in each patient's room provide immediate access to the Market Street site.

All ICU nurses have received Penn E-lert training. According to Kami Schaal, B.S.N.,

a former ICU nurse on Rhoads 5 who now works at Penn E-lert's command center, "After the training, many of the nurses were excited. I think it will be comforting to know that there's another experienced nurse looking after the patients, an extra layer of care."

Security On Many Levels

linically, Penn E-lert will fill two essential roles. First, it will help prevent adverse events by providing real-time information for the health-care staff to use in their patients' care. As Hanson puts it, "The cycle time between information and correction will be much shorter, and this is what intensivist care needs."

Second, the system will also help in the non-emergency decisions that are part of day-to-day patient care. "A patient might be ready to be taken off a ventilator but a staff person might be hesitant, especially if it's during the evening or night shift," explains Smith. "An extra set of trained eyes could help. We make determinations as a team."

Penn E-lert also meets all H.I.P.A.A. recommendations. A high level of electronic data security ensures that all patient information is secure and confidential. In addition, there's no capability for making video or audio recordings.

Over time, the system is expected to lower health-care costs through reduced mortality and length of stay in the ICU. According to an independent study of Sentara Norfolk General Hospital in Virginia, using the eICU system from VISICU reduced intensive-care mortality rates by 25 percent and shortened the average length of stay for these patients by 17 percent. Arnold Milstein, M.D., a founder and quality expert for the Leapfrog Group, a Washington-based consortium of large companies that are seeking to improve medical quality, also speaks highly of the online system. As quoted in a VISICU release, he said that using information technology strategically "can help hurdle health-care labor shortages and deliver breakthroughs in patient safety and health-care affordability."

At HUP, Hanson emphasizes that Penn E-lert "can't replace bedside care, but, as an extra set of eyes, it can help eliminate preventable medical mistakes and will serve as an added comfort to patients' families. They'll know that someone is always watching over their loved ones." •

Ed Federico and Sally Sapega



INSTI-



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he lobby of the Clinical Research Building was packed with department chairs, directors of centers and institutes, faculty members, administrators, even some members of the board of PENN Medicine. A few white coats were sprinkled among the elegant suits. It was late afternoon, a fitting time for light refreshments. The event was special, but since CRB is a site where the pace of work rarely flags, those who gathered for the scheduled announcement occasionally heard the squeak of the front door as people came and went. Undaunted, Arthur H. Rubenstein, M.B., B.Ch., executive vice president of the University of Pennsylvania for the Health System and dean of the School of Medicine, welcomed the audience.

"This afternoon," he said, "we have an institutional event in more senses than one: the occasion is the announcement of three new institutes, which I suspect is unprecedented even at Penn." The three he announced were the Penn Cardiovascular Institute; the Institute for Diabetes, Obesity, and Metabolism; and the Institute for Translational Medicine and Therapeutics. Rubenstein and Ralph W. Muller, the CEO of the Health System, explained the rationale for the three institutes. Then the new directors briefly shared their views.

The setting for the January announcement was appropriate, because all three of the institutes will be housed in the Clinical Research Building. As Rubenstein put it, "al-though only one of the three new institutes has the word *translational* in its name, all three share a general impulse to bring the fruits of research to the patient as swiftly and safely as possible. All three will be doing what centers and institutes can do more effectively than loose confederations of investigators – that is, encourage the interactions among researchers, physicians, trainees, and students more systematically."

Noting Penn's tradition of fostering research that cuts across departmental, disciplinary, and even school lines, Rubenstein continued, "We have so many centers and institutes on campus because we have found them to be an effective structure in advancing our research, clinical, and educational missions." He noted that, as with the other centers and institutes on campus, the three new institutes will emphasize cooperation, partnership, and combination of efforts. Not only do these new initiatives spring directly from PENN Medicine's strategic plan, the collaborative spirit is also much in keeping with the recently developed "Roadmap" from the National Institutes of Health.

In setting the context for the new institutes, Rubenstein referred to the work of committees that laid the groundwork. For example, a report on the need for a cardiovascular institute noted that, despite a multitude of excellent clinicians and researchers, "the work of these distinguished individuals does not collectively show our institution to the greatest advantage." That observation, Rubenstein said, could apply to other medical fields as well. Concluding his remarks, Rubenstein quoted from the vision articulated at the beginning of the "Plan for PENN Medicine":

"To benefit from the opportunities that lie ahead, greater collaboration among researchers, clinicians, and educators is required; and in particular, the collaboration



ancements

Already the home of several widely respected institutes and centers, PENN Medicine expects three new interdisciplinary institutes to help it realize more of its tremendous potential for preventing and curing disease. that springs from a mutual appreciation of respective and complementary skills." Strengthening the interrelationships at the intersections of research, patient care, and education, he continued, "presents tremendous potential for the prevention and cure of disease and improvement in the human condition."

Clearly, the three new institutes are intended to foster and benefit from that kind of collaboration. But why these three? The leaders of PENN Medicine acknowledge that resources have to be used judiciously – as Muller put it a few minutes after Rubenstein had finished, "We often have to make difficult decisions." But Muller went on to say that the areas targeted by the three new institutions "represent high priorities for PENN Medicine. . . . These institutes allow us to focus our strengths in these important areas of medicine and do so in a way that supports our faculty and benefits our patients."

Penn Cardiovascular Institute: First Steps

Michael S. Parmacek, M.D., director of the Penn Cardiovascular Institute, outlined some crucial early steps that the institute will be taking.

The first step is to establish the Penn Cardiovascular Disease Institute Advisory Council, which will be composed of leaders in cardiovascular science, medicine, and engineering from across the University.

Second, to establish multidisciplinary working groups in strategically targeted areas, including:

- i. Atherosclerosis/Preventive Cardiology
- ii. Cardiovascular Development/Congenital Heart Disease
- iii. Myocyte Biology and Heart Failure and Transplantation

- iv. Channel Biology/Cardiac Electrophysiology; and
- v. Cardiovascular Imaging/Bioengineering/ Nanotechnology.

Third, to promote communication among disciplines by establishing a communications office and a Cardiovascular Institute web site. (The model Parmacek cited was OncoLink, which serves the Abramson Cancer Center so well.)

Fourth, to establish an Office of Regulatory Affairs and Industrial Relationships to assist investigators taking part in patientoriented research.

Fifth, to provide the necessary infrastructure and core laboratories required to promote translational research.

Muller praised the three new directors: Michael S. Parmacek, M.D., director of the Penn Cardiovascular Institute; Mitchell A. Lazar, M.D., Ph.D., director of the Institute for Diabetes, Obesity, and Metabolism; and Garret A. FitzGerald, M.D., director of the Institute for Translational Medicine and Therapeutics. "You are wonderful - and forceful - colleagues," said Muller. "In your own distinguished work in your respective fields and in your proven leadership at Penn, you have demonstrated a devotion to the best qualities of academic medicine. . . . These institutes represent not just physical space, but a big idea whose time has come - and you are the best people to put it into action."

Parmacek, the Herbert Rorer Professor of Medicine and chief of the division of cardiovascular medicine, was the first director to speak. Citing the breadth and quality of faculty involved in cardiovascular research and medicine on the campus, Parmacek asserted that Penn "is uniquely positioned to address the ongoing epidemic of cardiovascular disease around the world." And the need for the best in research and care is evident, as shown by the grim statistics Parmacek recited: 16.7 million people around the world die each year from cardiovascular diseases; by the year 2020, heart disease and stroke will pass communicable diseases as the leading cause of both death and disability around the world; cardiovascular disease is the greatest single cause of mortality among women.

As if echoing Rubenstein's opening comment about the importance of translational medicine, Parmacek summed up the mission of the Penn Cardiovascular Institute thus: "to translate knowledge in cardiovascular biology and medicine across the University and Health System, and to create a culture where cardiovascular research and patient care are indeed truly one integrated mission." Lazar, the Sylvan H. Eisman Professor of Medicine and Genetics and chief of the division of endocrinology, diabetes, and metabolism, also cited some sobering statistics to explain the need for the new institute he directs. As he put it, "there is nothing funny about the obesity epidemic in the country and, in fact, in all industrialized societies." Overweight children are now in the majority in Philadelphia; and one out of three children born in the United States in the year 2000 will develop diabetes in his or her lifetime.

The mission of the new institute "is to play a leading role in understanding the causes of diabetes and obesity – from genes to behavior to the environment – and to use this knowledge to develop new ways to prevent, treat, and even cure these diseases and their complications." Like Parmacek, Lazar described Penn as "a perfect place to take this on with a comprehensive and collaborative approach." Lazar also underscored the



great promise in working with the University's other schools, noting that Stella L. Volpe, Ph.D., R.D., of the School of Nursing will be helping to "catalyze collaboration across the schools." Lazar, too, touched on the translational theme: The goal of all three institutes "is to reduce the barriers we face in translating our scientific discoveries into therapies."

The last director to speak was Garret FitzGerald, chair of the Department of Pharmacology and the Robinette Foundation Professor in Cardiovascular Medicine. After praising Rubenstein's vision for Penn, he also thanked Muller: "These institutes would remain philosophical

Institute for Diabetes, Obesity, and Metabolism: Four Units

In describing the structure of the new Institute for Diabetes, Obesity, and Metabolism, Mitchell A. Lazar, M.D., Ph.D., the director, identified its four interacting units. Each unit is devoted to a major disease, and each is directed, in Lazar's words, by "an internationally recognized leader."

The unit dedicated to *Type I diabetes* (also known as Juvenile Diabetes) is directed by Ali Naji, M.D., Ph.D., the J. William White Professor of Surgical Research. According to Lazar, Naji's pioneering transplants of whole pancreas and insulin-producing cells have the promise to cure Type I disease.

The unit dedicated to *Type II diabetes* – by far the most common kind of diabetes in the world – is directed by Morris J.

Birnbaum, M.D., Ph.D., the Rhoda and Willard Ware Professor of Diabetes and Metabolic Disease and a Howard Hughes Medical Investigator. Both of the diabetes units are expected to benefit from the Rodebaugh Diabetes Center, under the direction of Mark Schutta, M.D.

The *obesity* unit is led by Thomas A. Wadden, Ph.D., professor of psychology in psychiatry and director of the Weight and Eating Disorders Program, whom Lazar described as one of the world's leading experts on obesity.

Daniel J. Rader, M.D., associate professor of medicine, whom Lazar called "one of the great translational cardiovascular researchers in this country," heads the fourth unit, focused on *cardiovascular metabolism and complications*. notions without the investment made possible by his imaginative development of the Health System."

Surprisingly, although his institute is called the Institute for Translational Medicine and Therapeutics, FitzGerald was in some ways the most cautious on the topic. The national importance of translational research, he acknowledged, is great. "Yet, for all the talk, we are not very good at it." Taking one of his own areas of expertise as example, he said, "Academic medicine had lost, in large part, the skills of drug discovery and development." The old industrial model "is now in crisis."

"Despite unprecedented investment in novel approaches to target identification for drug development, the number of new drugs approved has been in decline and public confidence in the industry and the F.D.A. has plummeted. Perhaps there lies, within this crisis, an opportunity for academic medical centers to reassume a role, in partnership with or, in some cases, in competition with the forprofit sector in drug discovery and development – translational therapeutics, if you will. But first we have to relearn how to do it. . . . The challenges are organizational, fiscal, and cultural."

But Penn, of course, loves a challenge, and the three new institutes and his in particular will attempt to do what FitzGerald envisions: "try to increase the feasibility of pursuing translational research" and "increase the size of the community of investigators with the skills to pursue translational research at Penn." FitzGerald likened the challenge to that of dreaming up and then constructing some of the glorious buildings of ancient Rome and Renaissance Italy – a "hugely ambitious" undertaking.

"The stakes are high," he said, "but success would leave an impact on American health care which was both lasting and fundamental."

or four decades and more, the Philadelphia Antiques Show has nursed a grand ambition: to serve as a major fund-raising event for the Hospital of the University of Pennsylvania and the University of Pennsylvania Health System. Each year, the organizers select a recipient for the proceeds of the show, which are used to advance patient care. Last year, for example, the Philadelphia Antiques Show was able to raise more than \$735,000 for the Ultrasound Section of HUP's Department of Radiology. The fortunate recipient of this year's show will be the Division of Gastroenterology specifically, its Endoscopy and Imaging Center, which performs more than 10,000 procedures a year for a wide ar-



ray of disorders of the digestive and respiratory tracts. The Center's goal is to purchase state-of-the-art endoscopy equipment, including a digital x-ray system, which will allow for real-time patient evaluation and treatment. And if the Center's ambition is to be among the very best in the world, who would fault it?

The loan exhibition for the 44th annual show is called "Vaulting Ambition: Gothic Revival in Philadelphia, 1830-1860."

Although "Gothic" frequently refers to a style of architecture or literature, the loan exhibition will showcase examples of furniture and decorative arts from that period, both from this region and elsewhere. It is a style in which arches, columns, and crests are in abundance, and a mere ink bottle can bear medieval-looking images of the apostles.

Ably organized by a committee of more than 250 volunteers, this year's show will feature the wares of 56 of the nation's leading antiques dealers. The Haverford Trust Company is the presenting sponsor.

Beginning with a preview gala on Friday, April 8, the show runs though Tuesday, April 12. As usual, it will take place in the Armory at 33rd and Market streets in Philadelphia. For tickets, brochures, group rates, and information on guided tours and special events, call (215) 387-3500 or visit the show's web site at www.PhilaAntiques.com.



Scholarship Support Increases Access, Ensures Competitiveness

t her October inauguration as Penn's president, Amy Gutmann, Ph.D., invited her audience to join with her in a new "Penn Compact." Its first priority: increased access to education.

"The excellent education we offer must be more accessible," said Gutmann. "We must make a Penn education available to all outstanding students of talent and high potential. In a democracy and at great universities, diversity and excellence go together. Keeping them together requires access based on talent, not income or race."

There's no question that Penn's School of Medicine, ranked 4th in the nation in the most recent survey by U.S. News & World Report, offers an excellent education. Some 5,000 students competed for slots in this year's class; 242 were accepted, and three-fifths of those matriculated here. Top faculty, Penn's combined degree programs and integrated campus, a unique curriculum, a diverse and collaborative educational community, and excellent mentoring are just a few of the reasons they give for turning down other superior schools.

This year, the School of Medicine awarded \$4.9 million in scholarships to approximately 250 students, ranging from \$5,000 to full tuition (\$35,690). These figures place us in the middle of the pack, in terms of scholarship comparisons among our peer medical schools. But is it enough –

- to compete successfully for top students, when some schools have twice as much scholarship funding?
- to maintain and increase diversity, enriching our educational environment and helping to produce a physician work force more representative of the population?
- to keep debt burden low enough

that it doesn't hinder students from working in public health, primary

ZK

care, global medicine, and pediatrics? "Many *more* students apply for aid," says Gaye Sheffler, director of admissions and financial aid at the School of Medicine, "but we don't have the resources to give them all scholarships. Most of our aid comes in the form of loans. And students are telling us that they're making school selections based on their projected amount of debt, as well as on the school's educational programs."

Penn is not alone in facing these issues. Medical school tuition - here and across the nation – is rising faster than inflation. The sheer volume of information doctorsto-be must master has expanded exponentially in the last 20 years. New technologies have greatly improved both medical care and the management of information, but at the same time have increased the cost of medical education. Student debt burden continues to spiral upward, career choices are trending toward higher-paying specialties - and many students, especially minorities, wonder whether financial considerations make medicine an impossible career choice.

In addition, as the number of medicalschool applicants declines – from 47,000 in 1996 to 34,500 in 2004 – competition for the most gifted students becomes even fiercer.

In March 2004, the Association of American Medical Colleges documented disturbing national trends in a study called *Medical School Tuition and Young Physician Indebtedness:*

- Since 1984, median tuition and fees at private medical schools have increased by 251 percent (50 percent in constant dollars).
- The median debt for a private medicalschool graduate in 2003 was \$135,000. If tuition increases continue, this figure is projected to grow to \$158,000 for 2007 graduates. Many will be paying

off student loans for most of their working years.

- In recent years, physician incomes have increased only slowly – and have trended slightly downward in constant dollars.
- Since 1987, more than 60 percent of medical students have come from families in the top quintile of family income and less than 3 percent from the lowest quintile.
- In a recent national survey for the AAMC, cost was cited most often (by 33 percent) as the factor that deterred academically qualified minority students from applying to medical school. Cost was fourth on the list of deterrents for majority students.

Among students who graduated in 2002, 32 percent indicated that their level of debt influenced their choice of specialty. The latest match conducted by the National Resident Matching Program shows a continuing decrease in the number of medical students pursuing careers in primary care and an increase in the numbers gravitating toward radiology, orthopaedics, ophthalmology, and dermatology, all of which offer higher discretionary incomes.

Sheffler puts it bluntly: "To attract a highly qualified, diverse group of students to Penn, who will take advantage of our educational opportunities and lead tomorrow's health-care work force, we need to have strong financial aid packages, emphasizing scholarships and minimizing debts." At Penn, she adds, "We've been fortunate to have many generous contributors to the financial aid program. But we need others to follow their great example, as long as the cost of medical education is rising, students' debt burden increases, and many students aspiring to become physicians choose other careers because of the cost."

Marjorie Ernest Supports a Scholar – and Finds a Friend

٢٢ mind is a terrible thing to waste" is a sentiment that resonates deeply for Marjorie Ernest, a 1956 graduate of Penn's College of Women. "I knew it would give me tremendous pleasure to help someone with a good mind get a good education," she says of her decision to fund a four-year, full-tuition, need-based scholarship to the School of Medicine. Becca Newlin Hutchinson, now in her third year of medical school, is the first recipient of the Richard B. and Marjorie G. Ernest Scholarship. Yet Marjorie Ernest discovered that not only had she enabled a deserving student to get a world-class medical education, in a manner that honors her father's medical career and alma mater, she had also made a close friend.

"I met Becca on October 11, 2002. We met at the Faculty Club at the Inn at Penn for lunch, and we instantly bonded," Ernest says. "She's very down to earth, very sweet, and has a great sense of humor. She's really become part of my life."

With the demands of Hutchinson's medical studies, she and Ernest keep in touch primarily through a constant exchange of cards and letters. Ernest was an honored guest at her 2003 wedding to classmate Pete Hutchinson, and last year Ernest took the couple as guests to the Medical Alumni Society's brunch and to the Franklin Institute's exhibition on the *Titanic*. She also sends occasional care packages of deluxe steaks, fruits, and such – welcome treats for students on a tight budget.

For her part, Hutchinson says, "This scholarship meant a lot in terms of enabling me to choose Penn, and it makes a big difference in my career choices. I grew up in Philadelphia and feel a commitment to serving inner-city communities." There



The First Recipient: Becca Newlin Hutchinson (right) has a friend and supporter in Marjorie Ernest.

were military scholarships available, but Hutchinson, who was raised as a Quaker and attended Swarthmore College, was unwilling to become part of the armed forces. Other scholarships she could have applied for would have required her to practice in specific fields.

While she is deeply grateful for the financial support, Hutchinson says that the aspect of this scholarship that touches her most on a day-to-day basis is her relationship with Ernest. The wedding sampler that Ernest cross-stitched for the young couple hangs prominently in their apartment.

"It is great to have someone who is championing my cause, who offers unconditional support and understands how hard medical school is," Hutchinson says.

Ernest was inspired, in part, by the scholarships that Anne and Walter Gamble, M.D. '57, have created. She also saw this as a way to express her love and respect for her father, Richard B. Ernest, C'13, M.D. '15. Her mother, Lydia Ernest, created the Richard B. Ernest, M.D, Class of 1915 Scholarship Fund in 1987 to help support fourth-year medical students planning to specialize in orthopaedics. But Marjorie Ernest wanted to honor her father in her own way.

"We were really a medical family," says Ernest. Family life revolved around her father's dedication to his private orthopaedics practice, and he never took vacations because he was unwilling to entrust his patients to other doctors. Her mother, trained as a massage physiotherapist, worked with him.

"My father would carve the Thanksgiving turkey, and in the middle of all these wonderful smells, he would say, 'this is the such and such nerve," Ernest remembers with a laugh. Dr. Ernest died in 1983; Mrs. Ernest, in 1988.

When it came to the mechanics of creating the full-tuition scholarship fund, Ernest was pleased with the way PENN Medicine's development officers made it possible for her to spread her sizable contribution out over several years. "They worked with me to set up a payment schedule that wasn't so difficult," she notes. Ernest is also gratified when she hears recipients of her family's scholarships talk of one day supporting School of Medicine scholarships themselves.

As Ernest puts it, "To know that a scholarship you have provided can make a seemingly unattainable dream become reality, or to know that endowed money to be given as a gift or prize will ease the financial burden of a graduating student, is the most rewarding, satisfying feeling in the world." And, she adds, everyone benefits. "You think about what you could do, and then do it," she says, adding firmly, "You will never regret it."

Scholarship Support:

Jordan Scholar Scarlet Soriano Reaches Out to Teens

Reaching out to those who are needy, marginalized, and underserved comes as naturally as breathing to Scarlet Soriano. She grew up in poverty, first in the Dominican Republic, where she lived until age 14, and then in Brooklyn, where her mother, aunts, and uncles worked in factories. It was an undergraduate year she spent in South Africa, where she studied the impact of apartheid on health-care infrastructure and worked as an HIV/AIDS health educator, that set her on the path to medical school.

"I feel an absolute commitment to improving the fate of my community," says Soriano. "The pride that my family feels, that I am their emissary, walking the halls of Penn – it gives me goosebumps."

A second-year student in the School of Medicine, Soriano is also the recipient of a full-tuition Jordan Scholarship. Thanks to that support, Soriano knows she will be able to serve inner-city communities, armed with a world-class medical degree – but without a crushing debt burden to derail those dreams. Her husband and classmate, Peter Rowinsky, who plans to practice medicine with migrant workers, is partially supported by a Medical Class of 1944 Scholarship.

On her journey to PENN Medicine, Soriano earned an undergraduate degree in anthropology from Princeton University, with a concentration in medical anthropology; lived a year in her native Dominican Republic, doing HIV/AIDS work and sharing authorship of a United Nations paper on the status of women; and served three years as a bilingual guidance counselor in an inner-city high school in Boston. Then she worked for a year doing community outreach and advocacy with Prevention and Access to Care and Treatment (PACT), which helps HIV-positive people



Scarlet and cousins.

get past the obstacles to better health, such as homelessness, domestic violence, and addiction.

When they first applied to medical schools, Soriano and Rowinsky cast a wide net, and both were very impressed when they visited the School of Medicine. "My student interview was fantastic," she says. "I met with a fourth-year Latina student who was doing an HIV/AIDS research project in the Latino community."



Scarlet and Peter.

Intrigued by an experience so close to her own interests, she delved further and liked what she saw of Penn's minority community, innovative curriculum, and opportunities for community service. Soriano notes that Stanford University offered Rowinsky and her more in scholarship aid; but Penn came close enough that the couple felt it was worth a small financial tradeoff to go with their first-choice school. "The Jordan Scholarship made all the difference," she says. Henry A. Jordan, M.D. '62, G.M.E. '67, a trustee of PENN Medicine, and his wife, Barbara, have established scholarship funds that provide support for several medical students. They also contribute to the Medical Class of 1962 Scholarship Fund and to many other initiatives of the Health System and the School of Medicine.

At Penn, Soriano has become involved with Covenant House Pennsylvania, one of a nationwide network of centers serving homeless youth. She also volunteers with Penn's chapter of Boricua Latino Health Organization, working to improve recruiting among Latino students.

"All these experiences have really helped me lay out my plans for the future," says Soriano. She intends to specialize in adolescent medicine and would like to be part of – or create, if she has to – a community organization that would deal with the comprehensive needs of teens at risk: employment training, education, family therapy, and health care.

Soriano speaks frankly about the role tuition, scholarship aid, and debt play in the decisions minority students must make about medical school: "I think a lot of minority students are much closer to poverty – no more than a generation away – than many whites. We often have responsibilities beyond tuition and basic living expenses." In her own case, she notes, "I have been involved with the support of my family since I was 18 and am responsible for a major portion of my mom's support since she became disabled due to lupus and a stroke."

A recent report by the Institute of Medicine found that although Latinos constituted 12 percent of the population, they accounted for only 3.5 percent of all physicians; similarly, 1 in 8 Americans is black, but fewer than 1 in 20 physicians is black. At the School of Medicine, 9 percent of last fall's new students are black and 7 percent are Latino.

"When I went home for Thanksgiving, 30 people in my family got together," Soriano says. "I know that I am standing on their shoulders and, thanks to them, will be able to do something important. Now I can see that I'm a role model for my little cousins and nephews and nieces – they were playing with my stethoscope!"

UPCOMING EVENTS

Visit our website at www.med.upenn.edu/ alumni for more details, times, and locations, or call 215-898-5164 and ask to speak with one of our staff members in Medical Alumni Development and Alumni Relations.

American College of Obstetricians and Gynecologists (ACOG)

Monday, May 9, 2005, 6:00-8:00 p.m. San Francisco

The Helen O. Dickens, M.D., Memorial Dinner

April 30, 2005

An annual gathering of under-represented minority students, alumni, faculty, and house staff will be held at the College of Physicians of Philadelphia.

Medical Alumni Weekend May 13-15, 2005

For medical alumni celebrating their reunion (classes ending in 0 and 5) and all other medical alumni. This family-friendly weekend provides alumni with the opportunity to reconnect with the School and with classmates, faculty, and mentors. Guest rooms for this event have been reserved at the following hotels: Hotel Sofitel 1-877-411-7634 The Loews 215-627-1200 Park Hyatt at the Bellevue 1-800-233-1234 Sheraton Society Hill 1-800-325-3535

American Academy of Urology

Tuesday, May 24, 2005, 6:00-8:00 p.m. San Antonio, Texas

RECENT GIFTS

he Estates of Richer Goodwin, M.E. '30, G.M.E. '41, and his widow, Elizabeth M. Goodwin, have recently distributed more than \$5 million to the University, The sum will be used to create the Richer and Elizabeth M. Goodwin Professorship in the School of Engineering and Applied Science and the Dr. John Bernhard Mencke and Ada Collins Mencke Scholarship Fund in the School of Medicine.

The Abramson Family Foundation has contributed \$10 million as part of its \$100 million pledge for the Abramson Family Cancer Research Institute. Private donations are critical for "seeding" medical research, to bring studies to the threshold where they are considered for national grants. In large part thanks to the early support of the Abramson Family Foundation, funding to the Abramson Family Cancer Research Institute by the N.C.I., the N.I.H., and other granting agencies grew 89 percent from FY 2000 to FY 2004.

Continuing their support for cancer research and care at the University of Pennsylvania Health System, **Rena Rowan Damone** and **Vic Damone** have made a \$2 million gift, enabling plans to expand and relocate the Rena Rowan Breast Center into the new Center for Advanced Medicine upon its completion, now scheduled for 2008. In October 2005, the Rena Rowan Breast Center will celebrate its 5th anniversary.

In honor of her daughter, **Mrs. Frances Berger Seidman** made a \$1 million gift to support construction of the Center for Advanced Medicine. Mrs. Seidman has also supported important patient service programs at the Abramson Cancer Center, such as psychosocial counseling, through the Paula A. Seidman Breast Cancer Research and Education Fund.

With their \$1 million gift, **Richard B**. **Worley**, a trustee of PENN Medicine Trustee, and **Leslie Anne Miller, Esq.**, have provided substantial support for both the construction of the Center for Advanced Medicine, which will house the Abramson Cancer Center, and for the Alan J. Wein Professorship in Urology.

An anonymous gift of \$400,000 from **School of Medicine parents** will expand the Doctoring Longitudinal Patient-Centered Experience (DLPCE), created with their earlier gift. Part of the School's Professionalism and Humanism coursework, the DLPCE partners pairs of first-year students with a patient with a chronic health condition for three years, to help doctors-to-be understand disease from the patient's point of view.

AlumniNews



Progress Notes

Send your progress notes to: Penn Medicine Development and Alumni Relations 3535 Market Street, Suite 750 Philadelphia, PA 19104-3309

'60s

Stanley N. Cohen, M.D. '60, professor of genetics and of medicine at Stanford University, and Herbert W. Boyer, co-founder of the biotechnology firm Genentech Inc., were the recipients of the Albany Medical Center Prize in Medicine and Biomedical Research for 2004. They were recognized for their pioneering work in genetic engineering. The \$500,000 annual award is said to be the largest prize in medicine in the United States and second worldwide only to the \$1.4-million Nobel Prize. The early partnership of Cohen and Boyer eventually led to their development of recombinant DNA technology, commonly known as gene cloning. That research in turn has served as a foundation for genetic engineering and the creation of the biotechnology industry.

Frederick Keller, M.D. '68, professor of surgery and diagnostic radiology at Oregon Health & Science University School of Medicine, received the Gold Medal from the Society of Interventional Radiology. The medal recognizes those who have demonstrated extraordinary service to the society or to the discipline of vascular and interventional radiology. The Cook Professor of Interventional Therapy, Keller is also chairman of diagnostic radiology at OHSU and serves as director of the Dotter Interventional Institute there.



Stephen C. Rubin, M.D., '76, has been named chair of the Department of Defense's Ovarian Cancer Research Program review panel. This program, which awards nearly \$10 million annually in scientific grants, supports some of the country's most innovative research in the field of ovarian cancer. The Franklin Payne Professor of Gynecologic Oncology and chief of the division at the University of Pennsylvania, Rubin is a recognized expert in the clinical management and experimental therapy of ovarian cancer. He has published more than 250 papers and five textbooks in the field. Rubin joined the Penn faculty in1993, after spending the early part of his career at Memorial Sloan-Kettering Cancer Center.

James M. Seltzer, M.D. '77, was appointed clinical professor of medicine in the Center for Occupational & Environmental Health at the University of California at Irvine. He also serves as assistant clinical professor in the Division of Pediatric Immunology and Allergy at the University of California. He has spoken widely on the health effects of mold and on allergies and asthma.

'80s

C. Gene Cayten, M.D., G.M.E. '82, M.P.H., professor of surgery and of community and preventive medicine at New York Medical College, has been appointed senior associate dean at Our Lady of Mercy Medical Center in the Bronx. He had been serving as director of surgery there. He was recently awarded a certificate of appreciation by the State of New York Department of Health for his 15 years of service as a member of the New York State Trauma Advisory Committee.

Frederick (Rick) L. Jones III, M.D. '83, M.B.A., has left the global business development section of Wyeth Pharmaceuticals to become head of business development at BioRexis Pharmaceutical Corporation, based in King of Prussia, Pa.

Jay Mulaney (Moolchandani), M.D., G.M.E. '89, Lakeland, Fla., an ophthalmologist, was elected president of the Polk County Medical Association at its annual meeting. Currently, he is president of the medical staff at Lakeland Regional Medical Center, where he also serves on the board of directors. Recently appointed to the board of the Central Florida Physicians Alliance, he has been clinical assistant professor in the Department of Ophthalmology at the University of South Florida in Tampa since 1991. He is president of Central Florida Eye Associates.

OBITUARIES

William Menin, M.D. '31, Cheltenham, Pa.; December 19, 2003. Menin joined the staff of the gastroenterology department at Albert Einstein Medical Center in 1933 and practiced there until he was 90; he was former chairman of the department. In 1987, Menin and his wife, Margaret Greis Menin, established an annual award to be given to an Einstein resident physician who "demonstrates caring, warmth, and sensitivity to the physical and emotional needs of his patients."

Arthur H. Bernstein, M.D. '35, Maplewood, N.J., former associate professor of cardiology at Penn; February 22, 2004. He earned his B.A. and M.S. degrees from the University as well. Appointed assistant instructor of bacteriology at the School of Medicine in 1935, he became an instructor in cardiology in 1956 and associate professor in cardiology in 1959. He left Penn in 1978 to become medical director of Crossroads Health Plan and Essex County Health Organization in New Jersey. A member of many professional societies, he was also a diplomate of the American Board of Internal Medicine. Dr. Bernstein remained active at Penn throughout his career as president of the University of Pennsylvania's North Jersey Alumni Club and received the Alumni Award of Merit in 1974. He also established the Arthur Bernstein Cardiology Library Fund in 1977, dedicated to the continuing purchase of library materials in the field of cardiology.

Harry Pariser, M.D. '35, D.Sc., a retired dermatologist; August 8, 2003. After serving in Norfolk, Va., during the Second World War as the venereal disease control officer with the United States Public Health Service, he practiced as the city's first board-certified dermatologist. When the Eastern Virginia Medical School opened, he became a professor of microbiology there and was instrumental in the development of its division of dermatology. His two sons joined him in practice until he retired at age 84 in 1995.

Laura Ehrlich Morrow, M.D. '37, West Orange, N.J., a retired psychiatrist; January 13, 2004. She was former director of psychiatry and a senior attending physician at Passaic Beth Israel Medical Center and served on the staffs of Beth Israel and St. Mary's Hospital in Passaic. She did her internship at Lancaster General Hospital in Pennsylvania, then completed a psychiatry residency at the former St. Elizabeth's Hospital, the federal psychiatric hospital in Washington, D.C., and Greystone Park Psychiatric Hospital in Parsippany. An advocate for women in medicine, Morrow was the first woman president of the Society of Clinical Psychiatrists of Northern New Jersey. She played important roles in the Medical Women's International Association and was president of the American Medical Women's Association. In 1968, she was named Woman of the Year by the New Jersey Medical Women's Association. In 1976, she was inducted into the Douglass Society of Douglass College, where she earned her undergraduate degree when it was still called the New Jersey College for Women. A former president of the New Jersey Psychiatric Association, she received its Golden Merit Award for outstanding contributions in the field of psychiatry in the state.

Paul W. Eyler, M.D. '38, G.M. '47, Lancaster, Pa.; June 8, 2003.

Nino De Prophetis, M.D. '40, Media, Pa.; June 3, 2003. He earned a Bronze Star for rescuing a fellow medical corpsman during World War II. A thoracic and vascular surgeon, he was a staff surgeon at Chester Hospital, Philadelphia General, Temple University, and the Hospital of the University of Pennsylvania (where he also taught surgery). He served as chief of surgery at Sacred Heart Hospital and at Riddle Memorial Hospital.

Smith F. Hogsett, M.D., G.M. '40, Spokane, Wash.; June 2, 2003. He served as a Navy captain in the Marine Corps from 1941 to 1946. He practiced ophthalmology for 40 years in Spokane and was a member of the Spokane Medical Society.

Josiah McCracken Jr., M.D. '40, Framingham, Mass.; September 28, 2003. Benjamin Rhea Mooney, M.D. '40, York, Pa.; October 29, 2003.

Lewis T. Corum, M.D., G.M. '41, a retired pediatrician; September 10, 2003. He served in the Medical Corps of the U.S. Army from 1932 to 1946. In private practice in the Tampa, Fla., area from 1946 to 1970, he served a term as president of the Florida Pediatric Society. From 1970 to 1984, he was a civilian pediatrician at MacDill Air Force Base.

Rahn L. Hottenstein, M.D. '42, Halifax, Pa.; July 20, 2003. After serving in the U.S. Army Medical Corps in World War II (including the Battle of the Bulge), Hottenstein returned to Millersburg to practice until his retirement in 1979.

Russell E. Morgan Sr., M.D., G.M.E. '42, Bethlehem, Pa.; December 5, 2003.

John H. Bailey II, M.D. '43, Meadville, Pa.; February 22, 2003. Following graduation, he completed an internship at Robert Packer Hospital in Sayre, Pa., and then served as a flight surgeon in the U.S. Army Air Corps through the end of World War II. After the war, he completed a residency in internal medicine at the Mayo Clinic and returned to his hometown of Meadville, where he practiced for 50 years.

Frank Cline, M.D. '43A, Santa Barbara, Calif.; June 30, 2003. He was a communicable disease officer for the Santa Barbara Health Department. During World War II, he served as a naval medical officer in the South Pacific.

Samuel Herbert Wyatt, M.D., G.M.E. '43, Deptford, N.J.; November 5, 2003.

Edwin M. Cohn, M.D., G.M.E.'45, Bethesda, Md.; November 22, 2003. Cohn retired in the late 1980s as chief of gastroenterology at Albert Einstein Medical Center. He had been on the staff of the hospital and also maintained a practice in Jenkintown, Pa., for more than 40 years.

Bradley E. Copeland, M.D. '45, G.M.E. '49, Cincinnati; May 23, 2003. He served as chief of pathology at New England Deaconess

and the New England Baptist Hospital in Boston and had been on the faculty of Harvard University. In 1979, Copeland moved to Cincinnati and joined the Veterans Administration Hospital as chief of pathology. He was an emeritus professor at the University of Cincinnati Medical School.

Robert H. Kough, M.D. '45, G.M.E. '59, Danville, Pa.; June 26, 2003. A Navy veteran, he was director of the Department of Hematology/ Oncology at Geisinger Medical Center from 1974 to 1986 and served as a senior consultant there until his retirement in 1991. He was a clinical professor of medicine at Pennsylvania State University and served on the board of Pennsylvania Blue Cross/Blue Shield.

William A. Phillips, M.D. '45, G.M.E. '49, Holland, Pa.; June 30, 2003. He was a member of Penn's Department of Psychiatry until the mid-1970s. A former medical director at the Eastern Pennsylvania Psychiatric Institute, he had been president of the Philadelphia Psychiatric Society and the Pennsylvania Psychiatric Society. Phillips was a life fellow of the American Psychiatric Association.

J. Colin Campbell, M.D. '47, G.M.E. '51, Basking Ridge, N.J.; December 18, 2003.

C. Sanford Carlson Sr., M.D., G.M. '47, Knoxville, Tenn.; July 19, 2003. Carlson practiced orthopaedics in Knoxville for almost 40 years and served as chief of staff at Baptist Hospital. He founded the East Tennessee Orthopedic Clinic. He was a member of the American Academy of Orthopedic Surgeons, the American College of Surgeons, and the Knox County Academy of Medicine.

Henry H. Fetterman, M.D. '47, G.M.E. '53, Allentown, Pa.; May 26, 2003. A Navy Medical Corps veteran, he served during World War II and the Korean War and retired from the Naval Reserve as a commander in 1971. Since 1955, Fetterman had practiced obstetrics and gynecology. He also served as assistant chief and as chairman of the Obstetrics and Gynecology Department at Lehigh Valley Hospital. In 1987, he received a Distinguished Recognition Award from the Pennsylvania Section of the American College of Obstetrics and Gynecology.

Thomas Scarlett, M.D., G.M. '47, Hendersonville, N.C.; June 13, 2003. He was a radiologist at the Akron General Medical Center for 25 years. He was a member of the American College of Radiology, the Ohio State Medical Association, and the Summit County Medical Society. During World War II, he served as a captain in the Medical Corps.

Joseph R. Wilder, M.D., G.M.E. '48, New York, N.Y.; July 1, 2003. He was professor of surgery at Mount Sinai School of Medicine and director of outpatient and emergency surgery at the Hospital for Joint Diseases and professor of surgery at Mount Sinai Hospital for more than 20 years. He had also served as chief of surgery in the United States Air force. A well-known artist, he had several paintings appear on the cover of The Journal of the American Medical Association, and he exhibited his paintings at the Museum of Modern Art in New York and the National Portrait Gallery in Washington, D.C. His book, Athletes: The Paintings of Joe Wilder, M.D., featuring reproductions of more than 100 of his paintings, appeared in 1985. Wilder was one of nine Americans featured in a PBS documentary, "Ageless Heroes," for their productive lives after the age of 65. Wilder was also a member of the Lacrosse Hall of Fame.

Niels Haugaard, Ph.D. '49, emeritus professor of pharmacology; January 15, 2004. A native of Copenhagen, Denmark, he left the country after it was invaded by Germany. He received his undergraduate degree from Swarthmore College in 1942 and his Ph.D. degree in biochemistry from Penn in 1949. He was married to Dr. Ella Schwartzman, also a professor of pharmacology at the School of Medicine, with whom he wrote several of his early publications. She died in 1980. Dr. Haugaard published the classic series of studies on oxygen toxicity with Dr. William Stadie in the Journal of Biological Chemistry. His research on cellular energetics and metabolism led to many publications in the fields of hormone actions,

oxygen toxicity, and mitochondrial metabolism, all of which had implications for the treatment of heart disease, diabetes, and other diseases. In 1952 he won a Guggenheim Fellowship. Dr. Haugaard retired in 1987, but continued to work as a research scientist in the lab of Dr. Robert Levin. In 2001, he won a University Research Foundation Award for his work on lipoic acid.

John C. Mutch, M.D. '50, Moorestown, N.J.; October 1, 2003.

Gladys Rosenstein, M.D., G.M.E. '50, Arlington, Va.; November 1, 2003.

Edgar Archer Dillard Jr., M.D. '51, Galveston, Texas; May 29, 2003. He served as a naval aviator in World War II before beginning his medical training. He then worked abroad with Medico and USAID as head of a surgical team. Upon his return to Texas, Dillard served as director of gynecological oncology in the Department of Obstetrics and Gynecology at the University of Texas Medical Branch for 20 years.

Ji Toong Ling, M.D., G.M.E. '52, Louisville, Ky.; September 30, 2003.

Peter Safar, M.D., G.M.E. '52, Pittsburgh; August 3, 2003. An anesthesiologist by training, Safar founded and led several institutions, including the International Resuscitation Research Center at the University of Pittsburgh; but he is best known for developing life-saving cardiopulmonary resuscitation techniques, commonly known as CPR. He was a member of Physicians for Social Responsibility and of International Physicians for Prevention of Nuclear War.

Martin Goldberg, M.D., G.M.E. '54, Lafayette Hill, Pa.; January 27, 2004. A psychiatrist who dedicated his career to marriage and family counseling, he was appointed emeritus chairman of the Council for Relationships in 1997, after serving as director of the center for nearly 15 years. (It was founded as the Marriage Council of Philadelphia.) For more than 40 years, he was a clinical professor of psychiatry at the University of Pennsylvania School of Medicine





and a psychiatrist at the former Institute of Pennsylvania Hospital. He was a former president of the Philadelphia Psychiatric Society.

Marvin Goldman, M.D. '54, G.M. '56, Bala Cynwyd, Pa.; June 19, 2003.

Elizabeth Jackson Esoda, M.D., G.M.E. '56, Williamsburg, Va.; July 7, 2003. She practiced dermatology for 34 years in Haddon Heights, N.J., and taught at the University of Pennsylvania. She was a member of the Society of Investigative Dermatology, the Philadelphia Dermatological Society, the New Jersey Medical Society, and the New York Academy of Sciences.

Roger E. Cupps, M.D., '57, Rochester, Minn.; July 9, 2003. An associate professor of radiology at the Mayo Medical School, he specialized in therapeutic radiology. He was a member of the board of the Olmstead County Division of the American Cancer Society and a member of the Radiologic Society of North America. Donald M. Blatchley, M.D., G.M.E. '58, Greensburg, Pa.; October 15, 2003.

Banyong Thavaramara, M.D., G.M. '58, Chatuchak, Thailand; June 6, 2003.

Arthur A. Helgerson, M.D., G.M.E. '59, Lexington Park, Md.; January 21, 2004. While in medical school, Helgerson was commissioned in the United States Navy and served 32 years on active duty all over the world. He retired as a captain in the Medical Corps in 1978.

William N. Watson, M.D., G.M. '60, Milton, Fla.; June 30, 2003. He began his private medical and general surgery practice in 1962 after serving as a lieutenant and medical officer in the U.S. Navy.

William W. Reynolds, M.D., G.M. '61, Akron, Ohio; July 23, 2003. After serving in both the U.S. Army and the U.S. Navy, he maintained a private practice in internal medicine in Akron for 35 years. He also served as chief of staff at Akron City Hospital and was a member of the American College of Physicians.

Vincent Patrick Blue, M.D., G.M.E. '62; Newtown, Pa.; May 27, 2003.

Ronald S. Gottlieb, M.D. '65, G.M.E. '71, Ambler, Pa., a cardiologist at the Graduate Hospital; July 18, 2004. Dr. Peter Duca, his partner in a cardiology practice, estimated that Gottlieb had performed more than 10,000 cardiac intervention procedures in his career. Named a "Top Doc" in invasive cardiology by Philadelphia Magazine in 1994, 1999, and 2002, Gottlieb became head of interventional cardiology at Graduate in 1989. Earlier, he had worked at Thomas Jefferson University Hospital. In 1968, he joined the Air Force and was transferred to the Army. He worked as a doctor in the Central Highlands in South Vietnam, then finished his hitch at the former Valley Forge Military Hospital.

FACULTY DEATHS

Arthur H. Bernstein, M.D. See Class of 1935.

Donald L. Clark, M.D., Moorestown, N.J., emeritus associate professor of anesthesia; March 20, 2004. After serving in the U.S. Air Force, he entered Jefferson Medical College, where he taught before joining Penn. He later served as vice president of medical affairs and chief of the anesthesiology department at Deborah Heart and Lung Center. He made several trips overseas as part of a hospital team that performed surgery on young heart patients.

Nino De Prophetis, M.D. See Class of 1940.

Elizabeth Jackson Esoda, M.D. See Class of 1956.

Martin Goldberg, M.D. See Class of 1954.

Niels Haugaard, Ph.D. See Class of 1949.

William A. Phillips, M.D. See Class of 1945



Reunion is a time to return to campus, rekindle old friendships and rediscover PENN Medicine.

All classes are welcome for Medical Alumni Weekend, May 13-15, 2005, especially those celebrating their 5th, 10th, 15th, 20th, 25th, 30th, 35th, 40th, 45th, 50th, 55th, and 60th reunions. Experience the excitement and energy of PENN Medicine today!

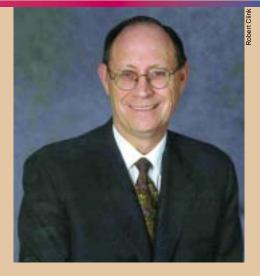
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The**Last**Word 🐺

Planning a New Center

o ensure its continued excellence, an academic health system must invest in both its people and its infrastructure. While the faculty and students are the most visible intellectual resources of our institution, we also have to invest in the traditional "bricks and mortar" that house our faculty, students, staff, and patients. Our last major research construction was the Biomedical Research Buildings II/III, opened in 1999; for patient care, it was the Jonathan Rhoads Pavilion, opened in 1994. With our Plan for PENN Medicine to guide us, however, we have begun to move ahead with an ambitious project that we expect will transform ambulatory and cancer care at our institution. Just as maintaining faculty excellence is one of the primary goals of our strategic plan, so is keeping our medical campus attractive and functional - to the people who work here and to the patients we are seeking to serve.

As I mentioned at the annual meeting of the Medical Alumni Society, the Riverview Project will eventually allow us to create a cutting-edge clinical and clinical research complex that will put us in excellent shape to face tomorrow's challenges. The Riverview Project will be built on the former site of the Philadelphia Civic Center complex. We are calling the first phase the Center for Advanced Medicine (CAM). While offering the most sophisticated diagnostics and treatments for outpatients, CAM will also serve as a practice site for many of our physicians as well as a training site for medical students and residents. At the same time, we expect the project to be a vital economic engine for Philadelphia and the surrounding region – not just during its construction but also because of the permanent health-care positions that will be created.



The Center for Advanced Medicine will be built on the site of the old Convention Hall and the Commerce Museum. Like the rest of the buildings to be demolished, Convention Hall has long stood vacant. Even if our programs could fit in the hall, experts have determined that it would have been prohibitively expensive to convert its interior for clinical care. In fact, much of the interior – its stands, for example – was not usable at all. When completed, CAM will be a spectacular, state-of-the-art facility, with about 360,000 square feet and from five to seven stories. We have characterized CAM as a "hospital without beds." Its main concourse will be broad, airy, and welcoming. Even a touch like having plenty of windows will serve to make the patients feel less intimidated. We have been greatly encouraged by the support of Penn's President, Dr. Amy Gutmann, who has also made it clear that she believes buildings devoted to health care need not forsake fine design.

CAM will also house the patient services of the Abramson Cancer Center of the University of Pennsylvania, parts of which are currently located throughout our campus. Radiation oncology, in conjunction with The Children's Hospital of Philadelphia, will be one of the premier services provided at CAM. In addition, CAM will accommodate our cardiovascular center and outpatient operating rooms. It will also have underground parking (an additional 156,000 square feet) and other patient amenities.

As part of our overall plan for the Riverview Project, we also hope to develop a proton-beam facility with Children's Hospital. The nearest facility offering proton therapy is at Massachusetts General, so we believe there will be a demand for this cutting-edge treatment in our region. Unlike traditional radiation therapy, proton therapy acts only on the tumor and does not cause collateral damage. Yet proton therapy requires a large facility: patient rooms will be 30 feet high to accommodate the necessary equipment. Building such a facility would be nearly impossible without a partner. Although we are continuing to work out the details of such a partnership with Children's Hospital, we are hopeful that both parties will approve the plans soon.

Demolition has proceeded slowly and deliberately. The Commerce Museum was first to come down. Demolition began inside Convention Hall with the removal of hazardous materials, and crews are now tearing down the exterior as well. Our goal is to have the CAM site prepared by October 2005 and open the center in 2008.

Last June, the University Trustees voted to approve the necessary expenditures to begin the work on CAM. I have no doubt that our plan to finance it without borrowing was a major point in our favor. Already, helped by our Development staff, we have received some leadership pledges that have buoyed everyone's spirits. Through the end of December, pledges for Riverview totaled nearly \$18 million. We are very encouraged that our alumni and friends share our vision of what CAM can be.

Arthur H. Rubenstein, M.B., B.Ch. Executive Vice President of the University of Pennsylvania for the Health System Dean, School of Medicine



he lean couple in American Gothic have had a strong iconic presence in our culture since Grant Wood painted them in 1930. Yet today, fewer and fewer Americans resemble them. Forty-five percent of Americans were considered overweight or obese in 1962; in 2000, it had risen to 64.5 percent. The professionals of Penn's Weight and Eating Disorders Program are busy evaluating treatments and diets and helping their patients lose weight in a healthy fashion.

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