When It’s More Than Baby Fat

A new childhood obesity clinic opened at Vanderbilt Children’s Hospital in December, and not a moment too soon: A recent report by the American Heart Association states that 10 percent of children ages 2 to 5 are overweight, up from 7 percent in 1994.

Dr. Greg Plemmons, assistant professor of pediatrics, directs the clinic. “Several of our pediatricians had been seeing these kids in our consultation clinic,” says Plemmons. “Our endocrinology clinic also was being inundated because most families think it’s a thyroid problem, but 99 percent of the time it’s not.”

Parents don’t know where to begin to help their children. “Adults try rapid weight-loss programs or even surgery, but we don’t generally recommend either of those things for children because the science is not available to prove it’s safe,” Plemmons says. “Our goal is to catch the weight problem early and stabilize it as they grow into their size or, if a child is truly obese, help them lose weight slowly while creating better habits that will last.”

Changes in lifestyle are fueling the obesity epidemic. “Some toddlers are consuming incredible amounts of juices and milk,” says Plemmons. “For instance, on-the-go sippy cups are now the norm. Thirty years ago, when bottles were made of glass, parents never let kids walk around and drink out of them. We’ve seen 2-year-olds take in 60 or 70 ounces a day, just carrying those around.”

Compounding the problem are cultural differences. “Weight is not viewed as negatively in some cultures as in others,” he says. “Each brings a separate set of challenges.”

Plemmons realizes he has an uphill battle. About 30 percent of families who come to childhood-obesity clinics never return. The rate of success in the best programs is about 30 percent.

“I try to help families come up with their own plan,” he says. “If they make the choices, they are more likely to follow through. Most parents and children are already aware of the health risks and don’t want to be lectured. We encourage the family to come up with simple goals.”

All Music, All the Time

Vanderbilt students can now get and share their music safely and legally thanks to a University partnership with Napster, one of the largest providers of online music with a library of more than 800,000 songs from major and independent record labels.

Last October the University launched VUmix, a comprehensive download service. A discounted price of $16 per academic year gives students unlimited listening to full-length songs and a variety of other features. In addition, students can purchase songs and albums from Napster to burn or transfer to an MP3 player or CD for 99 cents a song, or as little as $9.95 per album.

“VUmix is a continuation of our efforts to educate students about the very real problems of piracy and theft of intellectual property,” says Chancellor Gordon Gee. “As citizens and representatives of Music City, Vanderbilt students now have a way to be leaders in the music world through VUmix.”

In establishing the agreement with Napster, the University worked closely with the Campus Action Network (CAN), an initiative led by Sony BMG Music Entertainment and other record companies that are dedicated to facilitating the introduction of safe, legitimate digital music services to the campus environment.
$10 Million Grant to Help Produce Practical Theology Teachers

A landmark $10 million grant from the Lilly Endowment Inc.—the largest ever received by Vanderbilt Divinity School—marks the beginning of a move by the School and the Graduate Department of Religion to address a nationwide shortage of practical theology professors.

Vanderbilt will use the funding to create the Program in Theology and Practice, which is intended to produce more and better teachers for theological schools. “Graduate education in the United States is geared to the development of research knowledge and skills in isolated fields,” says James Hudnut-Beumler, dean of the Divinity School and Anne Potter Wilson Distinguished Professor of American Religious History. “While this has produced tremendous advances in scientific knowledge, there’s a need for developing scholars to think through how their knowledge will be put to use.”

Beginning ministers face a variety of challenges—people who have little or no history with organized religion, homeless addicts who repeatedly seek money but don’t seek to change, and efforts to reach across congregations sharply divided over politics, among others.

The Program in Theology and Practice is designed to prepare future professors to help clergy respond wisely to unforeseen circumstances.

“Through this project, Vanderbilt will play a crucial role in reshaping how future seminary professors are trained and have a powerful impact on the education of new generations of ministers,” says Craig Dykstra, the Lilly Endowment vice president for religion.

“The ultimate beneficiaries will be the congregations and members of religious communities whose leaders are shaped by a program that has no parallel in higher education today,” Hudnut-Beumler says.

Plans call for the first class in the new program to begin in the fall of 2006. The program will add up to one year of study to the Ph.D. curriculum for students who participate. Goals for the program include attracting 50 new graduate students in teaching for the ministry, and involving 25 divinity-school faculty members and 20 area clergy in an innovative curriculum. Vanderbilt will partner with at least eight seminaries in the region as part of the program.
Treatment May Work Better Than Transplantation

Up to 20 percent of heart-transplantation candidates die while waiting for a donor organ. Now a study comparing outcomes of patients from a decade ago to a more contemporary cohort suggests that many patients who meet the criteria for transplantation have outcomes comparable or even better with medical therapy than with transplantation.

Dr. Javed Butler, medical director of the heart transplant program at Vanderbilt University Medical Center, and colleagues evaluated the criteria used to assess eligibility of patients with heart failure for cardiac transplantation.

“A lot of patients currently listed for transplant could be safely managed with medical therapy if the criteria were changed and we only transplanted the sickest of patients,” Butler says. The research was highlighted in the Journal of the American College of Cardiology.

Increase in Novel Antipsychotics for Kids Questioned

Researchers at Vanderbilt Children’s Hospital report that—following concern about the overuse of the medication Ritalin—a new class of antipsychotic medications is being prescribed for an increasing number of children with attention deficit/hyperactivity disorder (ADHD) despite few studies of their benefits and risks when used in this fashion.

The study, published in the Aug. 3, 2004, issue of Archives of Pediatric Adolescent Medicine, revealed that between 1996 and 2001, the proportion of children on TennCare (Tennessee’s managed care program) who were new users of powerful atypical antipsychotic medications almost doubled.

“We would like for physicians to think very carefully before prescribing these drugs to children,” says Dr. William Cooper, associate professor of pediatrics.

Stimulating Nerves with Laser Precision

Biomedical engineers and physicians have brought the day closer when artificial limbs will be controlled directly by the brain by using laser light, rather than electricity, to stimulate and control nerve cells. The researchers discovered that low-intensity infrared laser light can spark specific nerves to life, exciting a leg or even individual toes without actually touching the nerve cells.

“Using lasers, we can simultaneously excite and record the responses of nerve fibers with much greater precision, accuracy and effectiveness,” says Assistant Professor of Biomedical Engineering and Neurological Surgery Anita Mahadevan-Jansen.

The method was developed by Mahadevan-Jansen; Duco Jansen, associate professor of biomedical engineering and neurological surgery; Dr. Peter Konrad and Dr. Chris Kao, both assistant professors of neurological surgery; and biomedical engineering doctoral student Jonathon Wells.

Health Assessment Gives Schools a Blueprint for Action

Nearly 72,000 school children will be the beneficiaries of a new partnership between Vanderbilt and all 129 Metro Nashville Public Schools to provide health assessments based on the Centers for Disease Control’s school health model.

Thomas H. Cook, assistant professor of nursing, has been appointed school health director for Vanderbilt Children’s Hospital and is overseeing the effort.

Using the CDC instruments, each school will receive a description of the school’s overall health. The assessments are scheduled for completion by April. Plans that capitalize on the schools’ strengths and facilitate improvement of school-health needs will be developed with each of the schools.

“The Metro School System will have a comprehensive picture of the health of its system,” says Cook. “They’ll have in their hands a blueprint for action.” Cook, no stranger to Metro Schools and health initiatives, in 2002 received a National Institute of Health grant to study nutrition and physical activity in three Metro Nashville schools. It has been demonstrated that excess weight in children follows those children into adulthood and is a risk factor for cardiovascular disease, diabetes, arthritis and some cancers. He is still analyzing the data, but results to date indicate increased health knowledge and increased leisure activity time in the children who were in the study.

Last August he, along with students in the School of Nursing, Vanderbilt Sports Medicine trainers and other Vanderbilt volunteers, began assessing each Metro Nashville school.

Each grade is being assessed using the CDC’s guidelines of nine components that create a healthy school—health education, physical education, health services, nutrition services, counseling, psychological and social services, healthy school environment, health promotion for staff, and family/community involvement. Cook, working with Vanderbilt’s child development program, also has added an assessment for pre-kindergarten development.

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Ritual by Fire

Peabody student Rashidah Bowen (center) lights the candle of a fellow student during a Martin Luther King Jr. Candlelight Vigil on Jan. 17 in Benton Chapel. Part of the annual MLK Commemorative Series, the vigil this year honored tsunami disaster victims.
**Business Savvy in Four Weeks**

A new program at the Owen Graduate School of Management will help undergraduates and those who have just graduated to acquire business skills to help them succeed on the job.

Accelerator-Vanderbilt Summer Business Institute, open to students in any major, is designed to provide an immersion into business life. The four-week program will be offered for the first time May 28 through June 25. Taught by a team of Owen School faculty, it will include academic instruction, practical job-skills development, real project experience, and networking with the business community.

Faculty director Mike Sicard, former chief operating officer for a $650-million company and a McKinsey & Company consultant, says the program was developed in concert with business leaders and recruiters to produce more marketable and productive employees from their first day on the job.

“In working with numerous companies, I noticed they shared a common challenge: No matter how bright and determined the recent graduates they employed were, they weren’t used to the business world and tended to slow the pace of the company,” Sicard says. “Employers must have new hires who can accelerate quickly and become as productive as possible in a short time.”

Accelerator’s curriculum focuses on strategy, financial accounting, managerial economics, marketing, finance, operations, human resources and organizational behavior, business ethics, problem solving, communication, teamwork and career planning.

Participants will develop a business plan for their own small business and apply all the lessons against that plan.

Graduates will leave the program with a portfolio of relevant work experience to present at interviews.

For information about the program, call 615/343-6291 or go to www.owen.vanderbilt.edu/vanderbilt/Programs/accelerator/index.cfm.

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**Medical Reserve Corps to Aid in Emergencies**

Vanderbilt School of Nursing and the Department of Emergency Medicine at Vanderbilt are helping build a local Medical Reserve Corps of health-care professionals who could respond to a mass casualty or other community emergency.

The Medical Reserve Corps was established in conjunction with the Nashville-Davidson County Health Department and the Mayor’s Office of Emergency Management after the events of Sept. 11, 2001.

“The Vanderbilt University School of Nursing received federal funding to begin work on building a Medical Reserve Corps program in Middle Tennessee, in part because of the School’s creation of a National Center for Emergency Preparedness,” says Colleen Conway-Welch, professor and dean of the School of Nursing and founder and director of the International Nursing Coalition for Mass Casualty Education.

“We’re looking for nurses, physicians, pharmacists, dentists, respiratory therapists, mental health specialists, emergency medical technicians, and other health-care and public-health professionals,” says Dr. Seth Wright, associate professor of emergency medicine and director of the Middle Tennessee Medical Reserve Corps (MTMRC).

“We are particularly interested in recruiting health-care workers who may be licensed but not working full time or are retired, or people who wish to learn how to become involved in building a plan to help our community in a disaster situa-
Human Research Program Receives National Recognition

Each year thousands of patients, students and volunteers help advance our understanding of science and medicine by taking part in research studies at Vanderbilt. Recently, Vanderbilt’s program to protect human research participants was awarded full accreditation by the Association for the Accreditation of Human Research Protection Programs (AAHRPP).

Vanderbilt is only the 13th organization to achieve this status. The AAHRPP accreditation is voluntary and includes a self-assessment process and on-site evaluation by peer reviewers. The process evaluates the entire program of human research-participant protection, of which the Institutional Review Board (IRB) is the largest part.

Since 1999, says Robin Ginn, executive director of research informatics and regulatory affairs, “We have completely revamped the human research protections program here at Vanderbilt, and this accreditation is proof of what we have accomplished.”

“It’s external validation that our program meets high standards for human subject protection,” adds Gordon R. Bernard, medical director of the Institutional Review Board and assistant vice chancellor for research. “We’re among the first two or three major medical centers to achieve this accreditation.”

Vanderbilt will submit annual reports and must be reaccredited every three years.

The MTMRC will educate and credential volunteers to be a part of the local community response team. The required time commitment for most members will be minimal. To find out more, log on to www.mtmrc.org.

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Peabody Professor Leads Homelessness Taskforce

Douglas Perkins, associate professor of human and organizational development, has been selected by Nashville Mayor Bill Purcell, JD’79, to facilitate the Mayor’s Taskforce to End Chronic Homelessness. Sparked by a federal initiative under the National Alliance to End Homelessness, the taskforce has been working on developing a 10-year plan to end chronic homelessness in Nashville.

“It’s important to stress the word chronic,” says Perkins. “These are people who have been homeless for at least a year and who generally have some form of disability, typically a serious mental illness or substance-abuse issues. The reason we’re targeting that core group is because they take up the vast majority of resources.”

The problems of America’s homeless have consumed the greater part of Perkins’ professional career. He has worked with several grassroots volunteer organizations and local government agencies.

Award Aids Blindness Research

John S. Penn, professor and vice chairman of the Department of Ophthalmology and Visual Sciences, has received a Senior Scientific Investigator Award from the New York-based Research to Prevent Blindness Inc. (RPB). The award provides Penn a stipend to support his research efforts and is his third award from RPB.

Penn’s research focuses on angiogenesis in the eye, an important feature of diabetic retinopathy, macular degeneration, retinopathy of prematurity, sickle cell retinopathy and other conditions, and is the leading cause of blindness in developed countries. Two of the angiostatic compounds Penn investigated under industry contract in 2004 recently received FDA approval for use in the treatment of eye disease. Penn came to Vanderbilt in 1998.

Ivey to Head American Folklore Society

Bill Ivey, director of the Curb Center for Art, Enterprise and Public Policy at Vanderbilt University, is the new president-elect of the American Folklore Society. Ivey, chairman of the National Endowment for the Arts from May 1998 to September 2001, took office as AFS president-elect on Jan. 1.

Ivey was director of Nashville’s Country Music Foundation, which manages the Country Music Hall of Fame, before being appointed by President Clinton to head the NEA. At the Curb Center he directs cultural-policy research efforts toward programs that will nurture creativity and enhance understanding of America’s complex arts and media systems.

The center is funded by Vanderbilt, a $2.5 million endowment from music-industry executive Mike Curb and the Curb Family Foundation, and multiple project grants from major foundations.

Based at Ohio State University, the American Folklore Society has more than 2,200 members.
Penn’s Rubin Named Law School Dean

Edward Rubin of the University of Pennsylvania Law School has been named the John Wade-Kent Syverud Professor of Law and dean of Vanderbilt University Law School effective July 1. Rubin is the Theodore K. Warner Jr. Professor of Law at Pennsylvania, teaching administrative law, commercial law, and seminars on topics ranging from administrative policy to law and technology, human rights and punishment theory.

“Ed Rubin is one of the most distinguished legal educators of his generation,” said Vanderbilt Provost and Vice Chancellor for Academic Affairs Nicholas Zeppos in announcing the appointment. “He is an innovative and creative thinker, a preeminent scholar, and a widely respected teacher.”

Earlier in his career Rubin taught and was an associate dean at the University of California, Berkeley, School of Law (Boalt Hall). Prior to that he was an associate with the law firm of Paul, Weiss, Rifkind, Wharton & Garrison in New York, where he practiced entertainment law. He holds a bachelor’s degree in history and anthropology from Princeton University. After earning his law degree from Yale University, he clerked for Judge Jon O. Newman of the U.S. 2nd Circuit Court of Appeals.

He succeeds Kent Syverud, dean and Garner Anthony Professor of Law, who announced last year that he would step down as dean. Rubin will be the first to hold the John Wade-Kent Syverud Professorship, endowed by alumnus Garner Anthony Jr. to honor Wade, who was dean from 1952 to 1971, and Syverud, dean since 1997.

Rubin says he was drawn to Vanderbilt by the dynamic scholarship, teaching and research activity at the Law School, including a new program in law and business, a new international master of laws degree, and partnerships with other academic units.

Vanderbilt, he says, is in a position to move forward with a major reformulation of legal education for the 21st century: “In the 19th century, legal scholarship and education was self-contained. Now, in our complex modern world, it must reach out to other disciplines, such as economics, sociology, political science and organization theory.”

He is author of numerous articles, chapters and books, including two volumes forthcoming this year—Beyond Camelot: Rethinking Politics and Law for the Modern State and Federalism: A Theoretical Inquiry, which he co-authored with Malcolm Feeley.

Vanderbilt 25th in Federal Research and Development Funding

An increase in funding of nearly 100 percent in four years has put Vanderbilt among the top 25 U.S. universities for the first time in recent history in terms of the amount of federally supported research and development projects it conducts.

The national rankings of federal research and development dollars that institutions receive are compiled annually by the National Science Foundation (NSF). These statistics do more than allow the nation’s universities to compare their success in obtaining federal funding; they also are considered one of the more objective measures of research quality.

“It’s a landmark accomplishment,” says Dennis Hall, associate provost for research and graduate education, of Vanderbilt’s rise to 25th from 31st in the latest ranking. “It reflects an institutional desire to make more of an impact on the world by means of research.”

Federal support for research projects at Vanderbilt nearly doubled to $215.5 million from $108.3 million between fiscal years 1998 and 2002 (the latest year for which national statistics are available). Among the top 40 ranked institutions, Vanderbilt’s 99-percent increase was second only to the 131-percent gain by the Baylor College of Medicine.

During this period, 77 percent of the total increase in federal research and development funding occurred in health and human services, driven by a doubling in funding at the National Institutes of Health mandated by Congress.

Vanderbilt Medical Center’s associate vice chancellor for research, Jeff Balser, attributes Vanderbilt’s growth in part to the University’s investment in recruiting science superstars. “We now have a substantial number of faculty capable of pulling in large-scale extra-mural research programs, such as NIH-funded centers, which dramatically impacts our rankings,” he says.
From 1999 to 2003, Vanderbilt’s ranking as a recipient of National Institutes of Health funding rose to 17th from 21st. This rise was powered by a 22.4-percent annual increase in funding, the highest of any university medical center in the country.

Although the Medical Center accounted for the lion’s share of the increase, research activity on the part of the central campus also increased substantially, Hall says. “The funding level on the central campus is approaching the same level as that of the entire University, including the Medical Center, just five or six years ago.”

Pressing Issues: Vanderbilt Lobby the State

Vanderbilt University has a vested interest in many of the 4,000-plus pieces of legislation proposed at the Tennessee State Capitol every year. It is the job of Betty Nixon, assistant vice chancellor for community, neighborhood and government relations, and her department to determine which of the proposed bills affect Vanderbilt and then garner support from local and national organizations.

“We’re usually following several hundred bills at a time,” Nixon says. “Right now there are around 50 proposed insurance reform bills, and we’ll have to follow them all until we figure out which ones have legs. In the end, we’ll probably end up testifying or trying to persuade people on 50 to 100 bills a year.”

Because of the magnitude of bills proposed every year, Nixon and her team have studied almost every issue imaginable, from child-restraint legislation to the viability of chelation therapy, a treatment for cleaning the blood. One of the most pressing current issues involves TennCare, specifically the proposal to slash 323,000 adults from its rolls. As the largest single provider of TennCare in the state, Vanderbilt has an enormous interest in the outcome. “If this change goes through, it will have a tremendously negative financial impact on the institution and an even greater problem for the patients,” says Nixon.

The Tennessee Lottery scholarships represent another area of concern. Vanderbilt has already had some success in this area, working with the Tennessee Independent Colleges and Universities Association to win equity for students attending private and independent institutions when the Hope Scholarships were first drawn up. Originally, students who planned to attend private universities were to receive only half that of students attending public universities.

“We’re very strategic about what we sponsor,” Nixon says. “We’ve never lost a major bill. We try to lay the groundwork and build a big support system for what we want to do, and we only take issues that are really important to Vanderbilt.”

Institute of Imaging Science to Include Powerful Research Magnet

Construction began this spring on a $26.7 million Vanderbilt University Institute of Imaging Science (VUIIS). The four-floor, 40,000-square-foot facility will occupy space formerly taken by the old emergency room parking lot between two wings of Medical Center North.

Seven million dollars of that cost will purchase one of the world’s most powerful research magnets. The 7 tesla magnet will be installed, with 400 metric tons of steel shielding around it, on the ground floor.

“Vanderbilt University Medical Center is making this investment now to assure that it captures the best opportunity to attract top-notch scientists and government research grants,” says Jeffrey R. Balser, associate vice chancellor for research. “If you delay for six months, it really limits the opportunity in this fast-paced field of science.”

A tesla is a unit of magnetic field strength. One tesla is roughly 20,000 times the strength of the magnetic field of the earth. The 7 tesla magnet, one of only about seven or eight in the United States, will enable researchers to generate images down to the molecular level and will ensure VUIIS remains at the forefront of research in magnetic resonance imaging (MRI).

“One reason we’re getting a 7 tesla magnet is to perform more advanced magnetic resonance spectroscopy,” adds institute director John Gore. “MR spectroscopy uses the same technology as magnetic resonance imaging (MRI) and functional MRI, but it produces ... biochemical information from small volumes within the body. For example, in the brain you can measure the levels of certain neurotransmitters. ... You can get a very precise assay of each of these molecules.”

That’s important not only for studying brain disorders such as addiction, but also for determining the effects of some drugs in the brain.

Another MRI technique already being tested at Vanderbilt is dynamic contrast imaging, which uses a contrast agent to generate images that provide information on angiogenesis, new blood-vessel formation required for tumor growth. This method one day may provide a way of determining the effectiveness of potential new cancer drugs.

The facility will provide research space for 18 faculty members and more than 40 graduate students and post-doctoral fellows in biomedical science, engineering and physics.

Three existing research magnets and other imaging systems used in animal studies will be moved to the second floor. A new facility also will be provided for imaging non-human primates, and a new 3 tesla human MRI scanner will be placed adjacent to the 7 tesla system.