

The Campus

“We are talking about a complete and

New Major Offers Critical Study of Film

VANDERBILT WILL LAUNCH A film studies major beginning this fall. Assistant Professor of English Paul Young, who came to Vanderbilt last spring from the University of Missouri-Columbia, will direct the program. “We’re excited about being able to invite students to think critically about films,” Young says. “We want to look at films as texts to be analyzed, like literature or poetry.”

The film studies program grew out of courses already being taught by professors in English, theatre, communications, philosophy, history, French, German, art history and other disciplines. Sam Girgus, professor of English, played an integral role in developing the program and was initially its acting director.

“Once we establish broader historical and aesthetic contexts

for understanding film than the ‘thumbs up or thumbs down’ criteria the mainstream critics use, we can go in many interesting directions,” says Young. “For example, we can screen German expressionist films of the 1920s and discuss both how they related to post-war economic and political upheaval and how they responded to expressionist painting and theatre of that time. Vanderbilt professors have been doing this individually for some time, but with a major program in place, we can collaborate on courses and campus events.”

Young plans a film festival and visiting speakers for 2004–05, including scholars and film-industry leaders. “One of my main goals is to establish a visible film culture on this campus,” Young says. “There’s a film society already that thrives quite well, the Sarratt Cinema. I want to expand the film com-

munity in an intellectual direction. We want students to feel that they can study films as rigorously as they want, wherever they want. If students have venues outside the classroom where they can discuss film-making and criticism in serious, analytical ways, they jump at the chance.

“It would be great for Vanderbilt to gain a reputation among students as a place where they can think as hard as they like about film and not be told, ‘You’re reading too much into it. It’s just a movie.’ Films don’t belong to their producers once they’re produced. Their meanings depend on the contexts of their production and their reception as much as they

depend on what the director or screenwriter or producer intended. Once one has that in mind, the field of film studies becomes endlessly complex and endlessly exciting.”

External Research Funding Jumps Dramatically

LAST YEAR THE AMOUNT OF external funding Vanderbilt researchers received from peer-reviewed contracts and grants increased by 19 percent to reach an all-time high of \$339.4 million. It was the second year in a row the increase in extramural funding has been in the double digits.

The Medical Center, which accounts for about 75 percent of

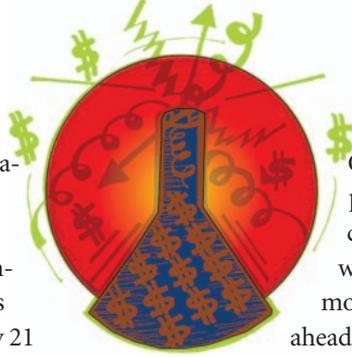


“Liberty is forgiving of many failings, but it forgives neither apathy nor neglect. The hard work begins anew each day.”

— National Security Adviser Condoleezza Rice, addressing graduates May 13 during the inaugural Senior Class Day on the eve of Commencement

Summer 2004

total replacement [of the Arts and Science curriculum]. ” —MICHAEL STONE



Vanderbilt's extramural funding, led the increase. The value of contracts and grants mushroomed by 21 percent, compared to a 12 percent growth in extramural funding for the rest of campus. The unprecedented rate of growth is due in large part to a five-year plan of the U.S. Congress to double the budget of the National Institutes of Health.

Much of last year's increase was linked to two new Specialized Program of Research Excellence (SPORE) centers at the Vanderbilt-Ingram Cancer Center: one in breast cancer and the other in gastrointestinal cancer. The National Cancer Institute created the program to speed up the exchange between laboratory research and patient treatment. Each five-year SPORE grant provides about \$2.5 million annually. Vanderbilt also has a lung cancer SPORE grant. The Medical Center also received a five-year, \$12.6 million contract to study vaccines for infectious diseases, including influenza and whooping cough.

Fiscal year 2003 was also unusually good for the rest of the campus. The School of Engineering experienced a 52 percent rise in contracts and grants. The Department of Electrical Engineering and

Computer Science posted a 64 percent gain. That was enough to move the engineers ahead of the College of

Arts and Science in terms of total funding dollars for the first time in the last 10 years.

With a 122 percent increase in extramural funding, the Department of Biological Sciences exhibited the most vigorous growth in Arts and Science. Physics and astronomy was up by 40 percent, while psychology rose 23 percent.

Two departments at Peabody College showed strong growth: Special Education was up 23 percent while Teaching and Learning grew by 173 percent.

Less Restrictive Curriculum to Replace Outdated CPLE

THE FACULTY OF THE COLLEGE of Arts and Science has voted to adopt a new curriculum to replace the 24-year-old College Program in Liberal Education (CPLE).

"We are talking about a complete and total replacement CPLE," says Michael Stone, professor of chemistry and chair of the Curriculum Revision Work Group. "We hope to have it implemented by the fall of 2005.

"This will open up the >>>



GERALD HOLLY

{Details}

Greater Than the Sum of Its Parts

Designed by American artist Ben Shahn, this mosaic has graced the lobby of the Nicholas Hobbs Laboratory of Human Development since 1969. The original painting of the mosaic, now in the Vatican Museum, was also done by Shahn, and the mosaic was then executed by French craftsman Gabriel Loire. A Robert Hooke quotation appears on the mosaic which begins: "So many are the links on which, if one be loose or weak, the whole chain is in danger of being dissolved ..."

{Inquiring Minds}

Slowing the Onset of Alzheimer's and Parkinson's

A multi-center team including Vanderbilt's Program in Human Genetics has identified a gene that appears to affect the age at which an individual begins to show symptoms of Alzheimer's or Parkinson's disease. The gene does not alter an individual's risk of having the diseases, the investigators reported last October online in *Human Molecular Genetics*.

Identifying genes that control "age-at-onset" could lead to therapies that delay disease onset beyond the natural lifespan. "A drug that would slow down the neurodegenerative process by five years would prevent a significant portion of Alzheimer's disease cases," says Jonathan L. Haines,

the T.H. Morgan Professor of Human Genetics and director of the Program in Human Genetics.

The Color of Money

Owen professor Mark Cohen's study of more than 1.5 million General Motors Acceptance Corp. loans made over a four-year period shows that when compared with white borrowers, blacks were consistently charged higher interest rates even when he controlled for such factors as amount financed, term of loan and creditworthiness.

Twenty-eight percent of white GMAC borrowers were charged a markup, compared with 53 percent of black borrowers, Cohen found.

An earlier study by Cohen found that 67 percent of Hispanics in Florida who took out loans with Nissan Motor Acceptance Corp. were charged a markup, compared with 47 percent of whites.

Brave New World

Assistant Professor of Computer Engineering T. John Koo and researchers from UC-Berkeley, Southwest Research Institute, and the Vanderbilt Institute for Software Integrated Systems (ISIS) are exploring the feasibility of using swarms of lightweight and highly maneuverable Micro Unmanned Aerial Vehicles (UAVs) such as small helicopters to perform autonomous navigation around buildings. Equipped with radio receivers designed by Theodore "Ted" Bapty, research assistant professor of electrical engineering, the UAVs can detect transmissions from broadcast communications systems such as radios, as well as radar and other electronic systems.

ISIS has developed a similar distributed-network acoustic-localization system to pinpoint the location of snipers. A team under the direction of Research Assistant Professor of Engineering Ako Ledeczi developed the technology behind the shooter localization application, which uses multiple small networked sensor nodes to locate a shooter's position and projectile trajectory.



NELL BRANKE

curriculum to considerably more possibilities than what is currently available, and will allow the creation of innovative courses while giving students more options in completing the liberal arts degree," adds Stone.

The proposal resulted from growing concerns raised that the CPLE had become archaic. Many faculty members felt the curriculum limited their ability to design rigorous new courses that would challenge the highest-caliber students. Both faculty and students said the course selection was too restrictive, resulting in juniors and seniors enrolling in large, first-year-oriented survey classes as they struggled to complete graduation requirements.

The new requirements have a three-course freshman-year common experience, writing-intensive courses, and a liberal arts core program. The liberal arts requirement is filled with 13 courses from the humanities and creative arts, international cultures, American history and culture, mathematics and natural sciences, and social and behavioral sciences and perspectives.

One of the most significant

changes is that every class carrying three or more hours of credit will count toward one of the liberal arts requirements. The courses must come from a minimum of seven departments, encouraging a broader range of academic exploration, and Advanced Placement credit can no longer be used to fill core academic requirements.

Campus Growth: Onward and Upward

AS CLASSES CONCLUDE FOR the summer, Vanderbilt University Medical Center is beginning construction on a \$110 million medical research building that will provide more than 200,000 square feet of research area. To be called MRB IV, the new building will be constructed on top of two existing buildings—Light Hall and Langford Auditorium.

Three research floors will be added to Light Hall, and five research floors and two vivarium floors will be built above Langford Auditorium. The project will also connect the two buildings, expanding both lobbies. Construction will continue over the next two years.

With the completion of >>>



The Incredible Lightness of Being

Vanderbilt freshman Dane Thorwaldson displays a Nijinsky-like form as he snags a Frisbee near Rand Hall.

{Inquiring Minds}

The Case of the Soda Culprit

It took a team of medical sleuths at Vanderbilt University Medical Center to get to the bottom of what was causing a 35-year-old man to have abnormal blood chemistries following his double-lung transplant, with the patient finally providing a vital clue.

When lab tests during a follow-up visit of transplant recipient Bill Turner revealed cyclosporine serum levels were elevated, creating the potential for drug toxicity and serious side effects, the transplant team began questioning Turner about his diet. The culprit was eventually revealed to be the soft drink Sun Drop. Though the bottler's formula is a trade secret, the company did acknowledge that it contains bergamottin, a compound found in grapefruits and Mediterranean oranges that blocks metabolism of certain medications in the liver.



Research Describes Major Cause of Infant Pneumonia

Vanderbilt Children's Hospital researchers have nailed down a clear picture of a newly described virus that is a leading cause of pneumonia in babies. A study in the Jan. 29, 2004, *New England Journal of Medicine* examines the impact of human metapneumovirus (MPV) on children.

"Our findings show human metapneumovirus is the second most common cause of serious respiratory illness in young children," says Dr. James E. Crowe, associate professor of pediatric infectious diseases. "This appears to be more important than influenza for babies."

After examining samples and data from more than 2,000 infants and children, seen over the course of 25 years and stored in refrigerators at the Vanderbilt Vaccine Clinic, Crowe and his team found MPV was the apparent cause of up to 12 percent of lower respiratory illness in the first year of life, rivaling the No. 1 culprit, respiratory syncytial virus (RSV).

"It's amazing to think that as pediatricians we've been seeing this virus for decades, and now it's exciting to know what it is," Crowe says.

Delirium in ICU Patients a Predictor of Mortality

Between 60 and 80 percent of patients in intensive care units develop delirium, which, according to a group of Vanderbilt physicians, is an independent predictor of mortality.

In the April 14 issue of the *Journal of the American Medical Association*, Dr. E. Wesley Ely, associate professor of medicine and research, and his team provided the first documented study to include daily measurements of delirium in the intensive care unit, pointing to longer hospital stays and a threefold increase in death.

"We have found that, using the most robust statistical methods available to adjust for severity of illness, age, coma and drugs used for sedation, the development of delirium presents patients with a 300 percent increased likelihood of dying by six months," Ely says. "All of this is ultimately leading us down the path of delirium prevention and treatment. Right now there are no data from randomized trials proving the best treatment."

this fourth medical research building, Vanderbilt will have added more than 1 million square feet of research space to the campus in recent years through medical research buildings alone. The need for more space is due, in part, to Vanderbilt's increased extramural funding from the National Institutes of Health, which has helped research programs grow.

"We filled MRB III within months of the building opening [last year]," said Dr. Jeffrey Balser, associate vice chancellor for research at the Medical Center.

MRB IV will house a total of 86 lab modules, along with conference space and a glass atrium spanning several floors.

Meanwhile, completion of a new greenhouse and biology labs in Medical Research Building III left Buttrick Hall essentially vacant and ready for an overhaul, making way for a new center for interdisciplinary studies.

"My faculty colleagues and I have been excited for several years about the potential of

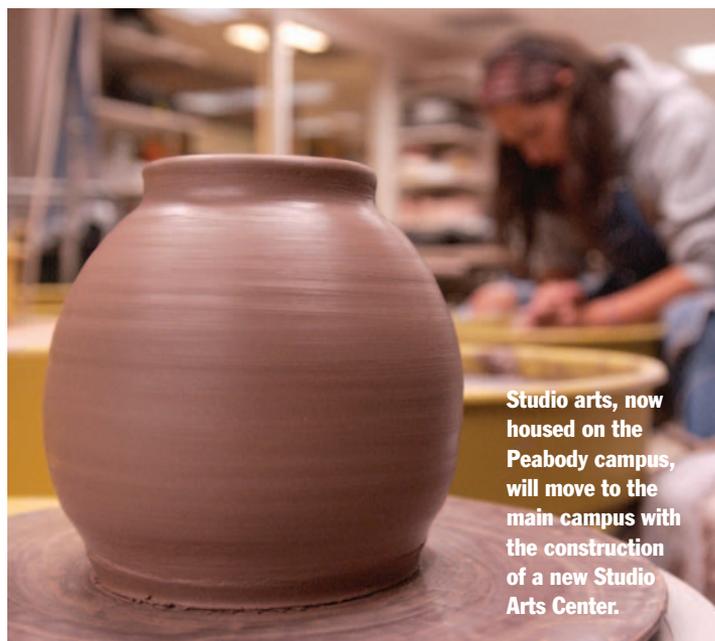
Buttrick Hall to serve as an intellectual hub for the University," says Richard McCarty, dean of the College of Arts and Science.

Buttrick Hall will expand from 38,000 to 90,000 square feet, including new lecture halls, private meeting rooms and an atrium. It also will be equipped for academic conferences, public lectures series, and the growing needs of Vanderbilt's transinstitutional centers. Construction costs are estimated at \$10.6 million.

By fall, construction also will begin on a new Studio Arts Center to be located between Branscomb Quadrangle and the University Club, and next to the Student Life Center already under construction.

"Our current facility is woefully lacking in many ways," says McCarty. "We will have a spectacular facility that will serve the entire University community."

The Studio Arts Center will provide the art department with much needed classroom and studio space, moving them



Studio arts, now housed on the Peabody campus, will move to the main campus with the construction of a new Studio Arts Center.

DANIEL DUBOIS

{The Definitive Word}

“Proteomics”

As explained by Daniel Liebler, professor of biochemistry and director of proteomics

Proteomics is the study of proteins and how they work. Just about all biology that's done by the cells and tissues involves the function of proteins, so in a sense, everyone doing research in biology is doing proteomics at some level.

The task of understanding the structure and function of proteins as integrated processes in cells is a huge challenge, much more difficult than that involved in determination of the

human genome. Since nearly all biological function is conducted by proteins, understanding the biosynthesis, structure, metabolism and function of proteins is critical to understanding health and disease.

One application that is generating excitement is the use of proteomics to determine “molecular fingerprints” for disease. Vanderbilt investigators have demonstrated that a distinct pattern of expression of 15 proteins in lung cancers can predict a poor or a good prognosis. The protein profiles also predict risk that the cancer has spread to lymph nodes, an important factor in determining treatment.

“Sketchy” or “Sketch”

As explained by *Vanderbilt Hustler* Editor Evan Mayor

As I was thinking about what to define for *Vanderbilt Magazine's* new “definitions” section, I asked many other students what word or phrase was the most popular this year on campus. Many quoted phrases from Will Farrell movies or Comedy Central's “Dave Chappelle Show,” none of which would have been very interesting to explore (and none that were PG-rated).

But while riding the elevator in the Lewis dormitory, defeated in my search for a suitable catchphrase, I saw the word “sketch” sketched into the elevator light.

And no, I am not talking about a brief general account or presentation (dictionary.com).

The word “sketchy” is currently being used to describe a shady person, someone who cannot be trusted, or someone who does not have an open personality. And “sketchy” the adjective has turned into “sketch” the noun, defining a sneaky individual. It is not uncommon to hear students say, “Oh, he's so sketchy,” or “That girl's a sketchball.”

So next time you want to call someone “weird,” say “sketchy” instead—it's the hot new word.



RON CHAPPEL / THINKSTOCK

from Peabody to the main campus with the other departments from the College of Arts and Science. The three-story building will have studios for sculpture, ceramics, photography, computer arts, painting and drawing. Gallery space will be available for exhibits. Estimated cost of the arts center, which is expected to open in fall 2005, is \$13 million.

Number Crunchers' Nirvana

PAUL SHELDON, JASON MOORE and Ron Schrimpf work in diverse fields at Vanderbilt: Sheldon, associate professor of physics, studies elementary particles. Moore, the Ingram Associate Professor of Cancer Research, analyzes high-dimensional genetic data. Schrimpf,

professor of electrical engineering, investigates the effects of radiation on space electronics.

The three are serious number crunchers whose research requires processing such large amounts of data that they need the services of a supercomputer. They shared a common vision for a state-of-the-art supercomputer center that would be available to Vanderbilt researchers in all disciplines. Their vision will become a reality with an \$8.3 million grant from Vanderbilt's Academic Venture Capital Fund to build a supercomputer center (SCC) in the Hill Center on the Peabody campus.

“Other similar high-performance computing centers are devoted to a single program or discipline,” says Sheldon.

“No one we know about has tried to implement the multidisciplinary idea.” Schrimpf adds, “It should increase our visibility among other researchers worldwide in a way that we never would be able to do otherwise.”

They predict that more and more of their colleagues in a variety of disciplines will join the ranks of high-performance computer users over the next decade. Money for the center will be used not just for computer equipment but also to set up a training and outreach center.

Vanderbilt's SCC will be built around VAMPIRE—the Vanderbilt Multi-Processor Integrated Research Engine—the 200-node cluster created three years ago that has served as a research tool and test bed for

the larger and more powerful SCC system. Each node contains two processors, dedicated memory and a networking chip.

The plan is to increase the number of nodes each year by one-third over three years, then begin to replace the oldest one-third each year with the fastest processors available. Each of the new nodes installed will have more than four times the computing power of an existing node. The cluster will benefit from future improvements in computer technology and continue to grow without becoming obsolete.

U.S. News Gives Peabody High Marks

PEABODY COLLEGE OF EDUCATION and Human Development has again ranked fourth



clinical psychology program also moved up, claiming the No. 26 spot after a ranking of 39 in 2001.

The Owen Graduate School of Management advanced six places to No. 39 from No. 45. The Law School maintained its No. 17 ranking, a spot it has held since 2001.

The School of Medicine's speech-language pathology program advanced two places to No. 6 from its eighth-place ranking in 2000. The school dropped one place to No. 15 overall among research-oriented medical schools.

Biomedical Engineering led Vanderbilt engineering programs with a rank of 20, down two places from the last time it was ranked in 2000. Other engineering programs in the top 50 were chemical, 49; civil, 41; computer, 45; electrical, 46; environmental, 35; materials, 47; and mechanical, 48. The School of Engineering ranked 53rd overall.

LifeFlight Expands Capabilities

VANDERBILT'S LIFEFLIGHT AIR ambulance program is adding more helicopters and last year began a fixed-wing program that allows it to pick up patients almost anywhere in the world.

In its first eight months of operation, the "fixed wing" program made more than 130 flights, including trips to Cairo, Egypt and Mexico City. Fixed-wing transport, based at the Cornelia Fort Airpark in Nashville, utilizes either a propeller airplane (a Beechcraft King Air E90) or an internationally configured Lear jet.

in the nation among education schools by *U.S. News and World Report* magazine in its annual ranking of leading graduate and professional schools. The College's special education program was named No. 1 for the second year in a row.

Vanderbilt School of Medicine's audiology program claimed the top spot this year, advancing to No. 1. The program ranked No. 2 in 2000, the last time this category was

ranked. The magazine ranks schools of business, education, engineering, law and medicine every year; other disciplines are ranked periodically.

Other Peabody programs in the top 10 were administration, advancing to No. 4 from fifth last year; education policy, moving up two places to No. 7; elementary education, dropping one spot to No. 7; and curriculum/instruction, maintaining its No. 9 ranking from

last year. Education policy came in at No. 10, the same spot it held last time it was ranked in 1998.

Peabody tied Teacher's College at Columbia University again for the overall No. 4 spot in teacher preparation programs.

In other rankings, clinical psychology in the College of Arts and Science jumped to No. 11 from its previous ranking of 39 in 2001. Peabody's

{Virtual Vanderbilt}



<http://www.library.vanderbilt.edu/speccol/vrr/>

Pull up a chair and immerse yourself in Vanderbilt's rich past in the Virtual Reading Room. A project of the Special Collections and University Archives Department of the Jean and Alexander Heard Library, the Virtual Reading Room offers information on the history of Vanderbilt University and George Peabody College; a digital version of the Southern Sociological Congress manuscript collection; a sampling of folk songs from the George Boswell Papers; photographs and short biographical sketches of members of the Fugitive and Agrarian literary groups; subject guides to manuscript resources; old postcards of Vanderbilt University and George Peabody College; and more. You can read a selection of articles from old *Vanderbilt Magazines* and other publications, some long-defunct. Check out the advertisements in the 1887 Vanderbilt yearbook, the *Comet*.

The new transportation method immediately proved its value when an explosion at an industrial site in Kentucky left several patients badly burned.

“Within minutes of receiving a call, we scrambled together a crew, equipment and an airplane and were able to assist in transporting patients to Vanderbilt’s Burn Center,” says LifeFlight nurse Chris Rediker, manager of the fixed-wing program. “After the patients arrived, the plane was sent to pick up donor skin.

been used extensively in Europe. The EC-145 can land or take off on steep terrain if the aircraft suffers from a single engine failure. The twin-engine helicopters allow pilots to fly in inclement weather, and they have engines that can be shut down in 30 seconds and are capable of landing without power. They have a cruising speed of 150 mph and a mission endurance of three hours, 25 minutes with a 30-minute fuel reserve.

“Our neonatal and pediatric



“Other than a small burn unit in Chattanooga, all burn injuries east of Nashville [in this region] are seen at Vanderbilt,” Rediker adds.

Vanderbilt Medical Center’s board of directors also has recently approved purchase of three new helicopters at a cost of \$5.4 million each. The new helicopters, American Eurocopter EC-145s, will be based in Clarksville, Shelbyville and Lebanon, Tenn.

Vanderbilt LifeFlight is the first hospital-based air ambulance program in North America to utilize the American Eurocopter EC-145, which has

services are also in high demand since Vanderbilt is the only facility in Tennessee that offers ECMO [extracorporeal membrane oxygenation] and cardiac surgery to neonates and children east of Nashville,” Rediker says. “We have also transported patients to Vanderbilt for potential organ transplant.”

New yellow phones have been placed in 50 locations in Tennessee and Kentucky, including hospitals and emergency medical services agencies, providing a hotline to the LifeFlight Emergency Communications Center.

{Top Picks}

Caring for Those Who Need It Most

Carol Etherington, assistant professor of nursing, was presented the 2003 International Achievement Award from the Florence Nightingale International Foundation at the group’s annual meeting in Geneva, Switzerland. Etherington, MSN’75, was chosen for the award among all other nurses in the U.S. and internationally for her contributions in advocacy for vulnerable and victimized populations, including work with child abuse, ethics, human rights, and victims of disasters.



DANA JOHNSON

Etherington has traveled to Bosnia, Cambodia, Angola, Sierra Leone, Kosovo, Tajikistan, Honduras and Poland during times of war or natural disasters. She is currently president of the USA board of Medicines Sans Frontieres (MSF), or Doctors Without Borders. She also has worked with the International Medical Corps and the International Red Cross to provide acute care to victims, conduct training for local doctors and nurses, and negotiate with government and health officials to integrate mental health into health systems.

Owen Student Wins Top Award

Owen Graduate School of Management student John Owens was named the 2004 winner of the Graduate Business Foundation Student Leadership Award at the foundation’s annual conference in Ann Arbor, Mich.



Owens established the Owen 2X1 campaign, a student-run, student-led internship and career placement program, and also created an online tool that captures each Owen student’s career preferences.

He is the second Owen School student in the 14-year history of the award to receive this distinction. In 1996, Jody Handler was named the winner for creating 100% Owen, a year-round volunteer program at the school that thrives today.

Cancer Researcher to Lead National Organization

Lynn Matrisian, chair of cancer biology, became president of the world’s largest organization for basic, translational and clinical cancer research at the American Association for Cancer Research’s annual meeting in Orlando, Fla., in April. Matrisian is also an associate professor of obstetrics and gynecology and the Ingram Professor of Cancer Research.



DANA JOHNSON

Her plans as president of the organization include developing a “Progress in Cancer Research” report for scientists as well as a version for non-scientists that would report on the state of cancer research in understandable language.