

Dean's Message

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Wow! We finally did it! Nearly 100 years after Atlanta Medical College became part of Emory, the School of Medicine has a permanent home for students, faculty, and alumni. I love everything about our new building. It is a beautiful and inviting place where the past and the future reside together in traditional and wi-fi style. It is a visible sign—locally and nationally—that we have never been more



committed to medical education nor more determined to be a model for training the very best physicians.

The building is an architectural gem. A new central wing connects the anatomy and physiology buildings, which first opened in 1917. Almost four times the size of the historic buildings, the enlarged complex allows us to grow our student body and make our newly minted curriculum come to life.

Several years in the making, the curriculum emphasizes active learning to create physicians who embrace healing and discovery in new and different ways to address the complex issues surrounding patients, families, and communities. Instead of focusing on large classroom lectures, the new curriculum places greater

emphasis on small-group learning and interaction between students and their faculty mentors who grow and learn together during all four years of medical school. Students learn the fundamentals of science within clinical settings and are immersed in clinical experiences from the very beginning. They also benefit from experiential learning through high-tech simulation labs, realistic patient exam rooms, a dissection facility equipped with computers for instant access to information and imaging, and much more.

Given the rigors of medical education, we hope our students will feel at home in the new building, which is open to them 24/7. As they study late into the night, they just might hear the voices of students past who once serenaded the entering class from the steps of the physiology building. The time has come to raise our voices again, as we celebrate and define the future of medicine.

Sincerely,

Thomas J. Lawley, MD
Dean

In Brief

New leadership in the health sciences



Fred Sanfilippo, MD, PhD

Fred Sanfilippo, MD, PhD, took the helm of the health sciences at Emory on October 1 as executive vice president for health affairs, CEO of the Woodruff Health Sciences Center, and chairman of Emory Healthcare. He succeeds Michael Johns, who became university chancellor this fall.

Sanfilippo comes to Emory from Ohio State University, where he was senior vice president and executive dean for health sciences and CEO of the medical center. He also served as dean of the College of Medicine and Public Health from 2000 to 2006. A specialist in transplant immunology, he began his medical career in 1979 at Duke, where he taught pathology, immunology, and experimental surgery. In 1993, he joined Johns Hopkins University School of Medicine, serving as Baxley Professor of Pathology, pathologist-in-chief of Johns

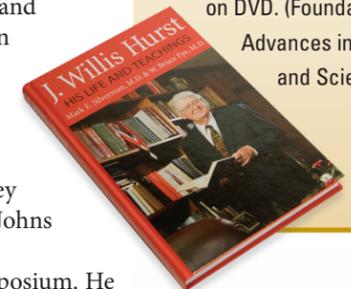
Hopkins Hospital, and chair of pathology in the medical school.

Last year, Sanfilippo was a keynote speaker at Emory's predictive health symposium. He helped launch a similar program at Ohio State.

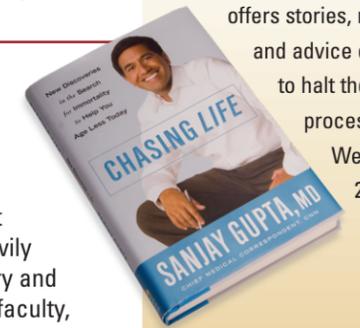
"Fred Sanfilippo will be a driving force as he continues the momentum of the health sciences at Emory," says Johns. "In coming to Emory and the Woodruff Health Sciences Center, he is joining the academic center with the greatest potential in the nation."

BOOKSHELF

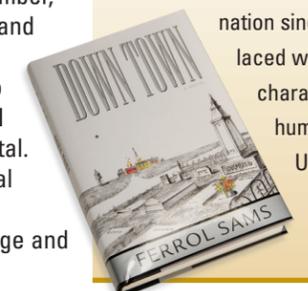
Physicians **Mark Silverman** and **Bruce Fye** collaborated on *J. Willis Hurst: His Life and Teachings*. In addition to the life story of the famed Emory cardiologist and teacher, they include selected essays by and about Hurst and a one-hour interview on DVD. (Foundation for Advances in Medicine and Science, 2007)



In *Chasing Life*, **Sanjay Gupta**, Emory neurosurgeon and CNN medical correspondent, offers stories, research, and advice on how to halt the aging process. (Warner Wellness, 2007)



Down Town, a novel by **Ferrol Sams**, 45M, begins after the Civil War. The book's characters provide a new perspective on the events that have shaped the nation since 1865, laced with Sams' characteristic humor. (Mercer University Press, 2007)



What about Grady?



What will happen to Grady Hospital? That question weighs heavily on the minds of Emory and Morehouse medical faculty, students, residents, alumni, and a host of Atlanta community leaders, patients, and citizens concerned about Grady's future.

The hospital is expected to lose \$55 million in 2007, a shortfall that could force Grady to close its doors before the end of the year. As of early November,

the Grady Health System owed a cumulative total of more than \$60 million to Emory and Morehouse for physician services.

Leaders from Emory, Morehouse, and the Atlanta community are working hard to keep that from happening. Supporters have stressed Grady's importance as a Level I trauma center, a health care provider for low-income patients, and a teaching hospital. "We want to help find the way for Grady to survive and flourish," says Emory medical dean Thomas Lawley.

Efforts to put Grady on firm financial footing are unfolding daily. For news coverage and updates from Emory, visit www.whsc.emory.edu.

In Brief

Top dollars in scientific discovery

Researchers working on new vaccines and therapies for influenza and AIDS, innovative strategies for treating type 1 diabetes, molecular triggers of head and neck cancer, genetic variations in schizophrenia, and better ways to diagnose and treat Alzheimer's disease are among the Emory scientists who last year earned a record \$383.9 million in research funding. That's more than any other university in Georgia.

Of that total, researchers in the Woodruff Health Sciences Center—including those in the School of Medicine—received nearly \$358.7 million, or more than 93% of the university total. Additionally, 72% of the university's annual awards came from federal funding sources. Funding from the NIH made up approximately 62% of annual awards to Emory and about 86% of total federal funding.

"In an era in which funding from the NIH has been essentially flat each year, or has even decreased relative to inflation, this is an extraordinary achievement for our investigators," says Emory President James Wagner.

In the School of Medicine alone, NIH funding increased by 9% and exceeded \$200 million in grants and contracts. The school ranked 18th in 2007 among all medical schools in the country in total NIH research grants awarded. In 1996, the school ranked 31st with \$55 million. Since then, the medical school has grown in NIH funding at the second-fastest rate in the nation.

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The number and size of NIH grants also have increased substantially. In 1996, five researchers received grants of \$1 million or more totaling \$7.1 million. Last year, 65 medical school researchers received comparable grants totaling \$162.8 million. This growth reflects the school's strategic effort to secure a larger share of NIH program grants involving multiple investigators.

One example is a \$32.8 million contract to establish a National Center of Excellence for Influenza Research and



Researchers working on new flu and AIDS vaccines are among the Emory scientists who last year earned the most research funding of any Georgia university.

Photo courtesy of CDC

Surveillance. The contract was one of six awarded last year by the National Institute of Allergy and Infectious Diseases (NIAID).

The National Cancer Institute awarded a \$12.5 million Specialized Program of Research Excellence grant in head and neck cancer to Emory's Winship Cancer Institute. The first of its kind awarded in Georgia, the grant will help bring laboratory findings to the bedside more quickly.

Medical researchers at Yerkes received a \$10 mil-

lion grant from the National Institute on Aging to compare the aging changes that occur in humans with those in nonhuman primates. The researchers will examine changes related to normal aging as well as those related to mild cognitive impairment or Alzheimer's disease. The study is the first anywhere to examine chimpanzee cognition in correlation with other aspects of aging.

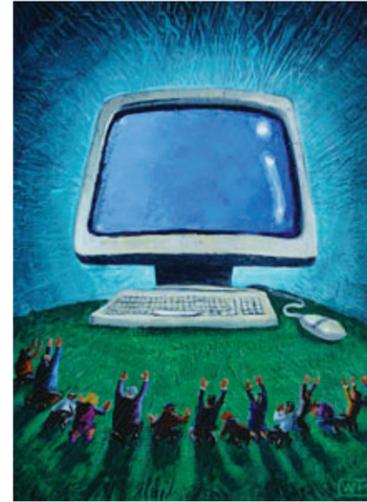
Other major awards last year include a \$7 million grant from NIAID to the Emory HIV/AIDS Clinical Trial Unit, which was designated as a primary site nationally in both the AIDS Clinical Trials Group and the HIV Vaccine Trials Network. Both are among the nation's premier NIH-funded clinical trials networks for HIV treatment and vaccine prevention.

Not included in Emory's 2007 research total is a new \$31 million NIH grant to establish the Atlanta Clinical and Translational Science Institute (ACTSI). Led by Emory along with Morehouse School of Medicine, Georgia Tech, and Children's Healthcare of Atlanta, the institute will speed up the translation of laboratory discoveries into patient care innovations and help reduce health disparities. ACTSI will engage both academic and community physicians, supported by one of the largest NIH grants in Georgia history.

Also this fall, Emory was awarded \$25.5 million to participate in the National Children's Study to examine the effects of environmental and genetic factors on child and human health. Emory is one of 22 U.S. study centers that will follow 100,000 children from before birth to age 21. The study will seek information to prevent and treat major health problems, including autism, birth defects, heart disease, diabetes, and obesity. The School of Medicine, the Rollins School of Public Health, Morehouse School of Medicine, and Battelle Memorial Institute are collaborators in the Emory study site.

SUPERSIZED NUMBER CRUNCHING

Emory has supersized its computing ability, making it one of the world's 500 most powerful computing sites. Its high-performance



computer cluster allows researchers to conduct simulations deemed too costly or impractical using conventional laboratory methods.

For Andrew Karellas of the Winship Cancer Institute, the new cluster provides unprecedented research opportunities in early detection of breast cancer through the use of new imaging techniques.

Karellas, a Georgia Cancer Coalition Distinguished Scholar, and

radiologist Ioannis Sechopoulos are exploring the level of radiation that patients receive from two new types of breast imaging techniques—digital tomosynthesis and computed tomography. Although not yet commercially available, these

techniques may some day provide more detailed views of breast tissue than previously available.

As Karellas notes, clinicians need accurate knowledge of how much radiation the breasts and other areas of the body receive during imaging procedures. This information helps determine the appropriate imaging procedure for each patient. With proper management of radiation dosage through accurate dosimetric information and good communication between medical physicists and physicians, the radiation dose and risks to patients can be minimized.

Previously, some of the simulations that Karellas wanted to undertake would have taken months and even years of computation time. Now those computations will take no more than a few days.

The new computer cluster also enables Andrew Jenkins to improve patient safety and treatment by creating more effective general anesthetics.

"We do not yet really understand how anesthetics work at the molecular level," says Jenkins. "The only way we can efficiently simulate the anesthetics' effect on the central nervous system is by using brute-force computational methods, which the new cluster allows us to do."

PREPARED FOR ANYTHING

THERE'S NO SUCH THING AS BEING OVERLY PREPARED WHEN IT COMES TO A DISASTER. In light of concerns regarding a possible flu epidemic and the recent tragedy at Virginia Tech, Emory has formed an Office of Critical Event Preparedness and Response (CEPAR). Emergency medicine physician Alexander Isakov, who has extensive experience in emergency response and disaster medicine, heads that office.

CEPAR's formation evolved from a recommendation by Emory's Avian Influenza Task Force, which examined the ability of the university and Emory Healthcare to respond to pandemic flu or other events. However, CEPAR covers a much wider spectrum of possible crises, including natural disasters, catastrophic events, and public health emergencies. In addition to bridging various components of the university, the office works with the broader community to improve outcomes during and after an emergency. Notes Isakov, "The resulting collaboration and capacity to engage our local, state, and federal partners with one voice affords a new opportunity for Emory to have regional and global impact in this discipline."

