

Focus

FEBRUARY 2002

From bench to bedside: Downstate excels in treating heart failure

"Many people think that they have the most to fear from cancer, but chronic heart failure is more malignant than most cancers," says Dr. Luther Clark, Downstate's chief of cardiology.

Almost 5 million Americans suffer from heart failure, and over 250,000 die from it each year. While the mortality rate for coronary heart disease has started to come down, the rate for heart failure has doubled since 1968 and is higher for African-Americans than for whites, across all age groups.

Congestive heart failure is the number one cause of hospital admission for patients 65 and older, and women are the majority. "With the aging of America, we can expect to see even greater numbers of heart failure patients," says Dr. Clark. "While studies on the regeneration of heart tissue are in progress, they have not yet produced clinical applications. But we do have new treatments that can extend life and significantly improve the quality of life."

Dr. Clark believes that Downstate, as the only academic medical center in Brooklyn, is uniquely qualified to care for patients with advanced heart failure. "The clinical center for heart failure at UHB brings together the best that Downstate offers in clinical care, education, and research," he says. "Our goal is to become the premier heart failure center in our region."

On the cutting edge

Although the common symptoms of heart failure—shortness of breath, less tolerance for exercise, and signs of fluid retention—may be acute, especially after a heart attack, for many patients the deterioration develops over several years. Uncontrolled high blood pressure, diabetes, coronary and arterial diseases, plus age can speed up the process, weakening the heart to such an extent that it no longer pumps sufficient blood to meet the demands of daily living. Treatment options vary from oral medications or intravenous therapies to mechanical assist devices and, in extreme cases, a new heart.

The Division of Cardiovascular Medicine offers a complete range of diagnostic and therapeutic services, including preventive cardiology, cardiac rehabilitation, and noninvasive tests such as ECG and blood-pressure monitoring, stress testing, and echocardiography (to measure how efficiently the heart is pumping and to detect valve abnormalities using ultrasound). Other procedures include angioplasty (nonsurgical treatment of a blocked blood vessel), pacemakers, and defibrillator implants.

"We have had particular success with a new kind of implantable device that is not widely available," says Dr. Clark. He explains that while a conventional pacemaker is effective at correcting a slow heartbeat, the automated internal cardiac



Dr. Luther Clark, chief of cardiology, evaluates a patient for signs of heart failure.

defibrillator (AICD) can also stabilize a racing heartbeat. It has saved many lives by reducing the risk of sudden cardiac death.

Moving research from the lab to the patient's bedside

UHB offers a major advantage over most hospitals. "The beauty of practicing in a university setting is that we are privy to the newest drugs and surgical devices," says Dr. Judith Mitchell, assistant professor of medicine and director of the SUNY Downstate Heart Failure Center. "By participating in clinical trials, our patients benefit from medications that are not widely available.

Our scientists are known for pioneering heart research. Dr. Robert Furchgott's Nobel Prize-winning discovery of the effects of nitric oxide on the cardiovascular system laid the groundwork for lifesaving heart medications. Another

(continued on next page)

From bench to bedside (continued)

faculty researcher, Dr. M.A.Q. Siddiqui, chairman of anatomy and cell biology, has discovered an agent that protects the heart by inhibiting the signaling mechanism that activates certain cardiovascular disorders. He hopes to begin clinical trials soon to test its effectiveness.

"The Center for Cardiovascular and Muscle Research has a proven track record in basic science research. Now we about to translate bench findings into clinical applications," says Dr. Siddiqui.

Creating clinical pathways

The cornerstone of Downstate's heart failure program is comprehensive clinical care. Each year between 400 and 500 patients are hospitalized at UHB for congestive heart failure-related illnesses. Since patients often come through Emergency Services, their case management is a carefully orchestrated meeting of the minds among emergency staff, cardiologists, nurses, and other health professionals.

"Because so many hospital personnel are involved in each patient's care, we created a clinical pathway to ensure

accountability, improved coordination, and to promote interdisciplinary collaboration," explains Dr. Mitchell. The clinical pathway maps out the treatments and tasks for each member of the heart failure team. Every Friday morning, Drs. Clark and Mitchell meet with other members of the Clinical Pathways Committee to discuss each patient's progress.

"By benchmarking best practices, we optimize patient care, help improve symptoms, and forestall the need for hospital readmission," says Dr. Mitchell. She notes that shorter lengths of stay also produce cost savings that make the hospital economically more competitive and attractive to managed care organizations.

Heart Failure Clinic

In keeping with its comprehensive approach to patient care, the Division of Cardiovascular Medicine operates an outpatient clinic for discharged hospital patients and referred outpatients. The clinic offers early follow-up care along with health information and patient education.

Begun a little over a year ago, the Heart Failure Clinic provides the most modern and comprehensive approach to treating patients with heart failure. "Formerly the emphasis was on managing symptoms," explains Dr. Mitchell, who directs the clinic. "Now we are able to relieve symptoms and also remodel the heart by aggressively treating patients with angiotensin converting enzyme (ACE) inhibitors, beta blockers, and other new therapeutics that can dramatically improve cardiac function and patients' outcomes."

Since these drug regimens are often complex and may be confusing, especially for elderly patients, the clinic's nurse coordinator and patient educators play important roles in ensuring compliance.

"We excel in providing an organized program that gives our patients access not only to physicians and nurses, but also social workers, nutritionists, and an exercise physiologist," says clinic coordinator Meriam Caboral, RN, NP. "In the past, heart failure patients were caught in a revolving door—treatment followed by readmission. Our outpatient program has helped them break that cycle."

Black History Month Special Events

- FEB 1 Opening Day, with special guests Dr. Judith LaRosa, a WTC engineer, and Imam Siraj Wahhaj
12–2 pm, Alumni Auditorium.
- FEB 7 Historical Program
11 am–3 pm; location TBA.
- FEB 12 African-American Heritage Sale.
- FEB 14 Black History Committee Luncheon
12–1:30 pm, location TBA.
- FEB 21 Youth Inspirational Gospelfest
6–9 pm, Alumni Auditorium.
- FEB 22 Cultural Fair and Children's Festival
1–8 pm, Student Center.
- FEB 26 10-Minute Play Festival, presenting a play by Martha Thomas and a poetry performance
12–2 pm, location TBA.
- FEB 28 Health Fair
11 am–3 pm, UHB clinic area.



At an open house sponsored by the Department of Physiology and Pharmacology, President John LaRosa, department administrator Rose Jackman, and Nobel Laureate Robert Furchgott welcome campus members to the resources of the Furchgott Library. With the proceeds of a fund-raiser organized by Ms. Jackman, the department refurbished its existing library to create the new facility, which includes displays of Dr. Furchgott's Nobel Prize, Lasker Award, and other citations, plus his instruments, notes, papers, and early photographs.

ALONG CLARKSON AVENUE

A MINI-MED SCHOOL GROWS IN BROOKLYN

Thanks to a \$10,000 educational grant from Pfizer Pharmaceuticals, Downstate medical students will have the opportunity to play an important role in promoting community health education. The Mini-Medical School Program involves students in presenting 1- to 2-hour health sessions at schools, churches, and other public venues in the community.

According to Lorraine Terracina, dean of students, winning this competitive grant was a real coup for Downstate. Among the several Mini Medical Schools that Pfizer sponsors across the country, ours is one of only three schools selected this year in the northeast region.

Students or student organizations that wish to participate are invited to submit proposals to the Office of Student Affairs describing the topics they plan to teach. Those selected will receive all necessary funds to cover course materials, audiovisual aids, publicity, and so on.



Standing in for Dean of Medicine Eugene Feigelson, President John LaRosa accepts a generous check from Douglas Vanderberg, M.D. (to his left), Pfizer's regional director of medical research, to support our community health education outreach efforts. Dean of students Lorraine Terracina, who hosted the reception, is also shown here along with Dr. Stephen Goldfinger (first row, second from r.), clinical professor of psychiatry, and members of the Pfizer team.

HELPING THE VICTIMS OF 9/11

Following the attack on the World Trade Center, Downstate students organized a relief fund for the victims and their families. The students raised roughly \$8,000, which they contributed to the American Red Cross, New York Times 9/11 Neediest Fund, and community service agencies. Close to \$3,300 of this amount went to support the work of the Church Avenue Merchants and Block Association (CAMBA) and Safe Horizon (formerly, Victim Services), which provide a wide array of human services to residents of Brooklyn, especially those who live in Flatbush.



CHRP student Marjorie Delva (r.), and first-year medical students Joey Fernandez (c.) and Suzanna Popp (l.) present checks to Clair Harding of CAMBA and Valerie Montgomery of Safe Horizon to help the victims of the World Trade Center tragedy.

NEW FACILITY RESOURCE ROOM

At the Scientific Computing Center's open house, held November 13, Matthew Avitable, director of SCC and academic computing services for the Medical Research Library, unveiled the new Faculty Resource Room. Featuring wireless Internet access, infrared web access for PDAs, 35mm slide makers, scanning stations, and a dye sublimation printer, the facility is a great resource for graduate students, faculty, and researchers.



Dr. Matthew Avitable demonstrates new technologies that are available in the library's Faculty Resource Room.

BETTER THAN A THOUSAND WORDS

As a way of persuading young people to reject violence, members of Doctors Against Murder (DAM) have developed a scary but effective educational tool. They visit local schools with a slide presentation showing photos of teenagers brought to Kings County Hospital's emergency room with horrible injuries, such as multiple stab wounds to the chest, a knife buried in the head, or a face blown apart by a shotgun blast. Typically when students see these images they first cover their eyes but then watch in earnest. Perhaps they are thinking, "That could be me."

On a recent visit to Wingate High School, members of DAM were accompanied by a teenager who was a victim of violence. Now wheelchair-bound for life, he told the student audience that he welcomes the chance to share his experiences in the hope that it will save others from a similar fate.



Dr. Gerald Deas and other members of Doctors Against Murder urge students at Wingate High School to spend more time learning, not fighting.

COMMEMORATING WORLD AIDS DAY

In observance of World AIDS Day, the Student Center Governing Board displayed panels from the AIDS quilt in the Atrium. Also on hand to help spread AIDS awareness, Richard Green, adjunct professor at Medgar Evers College and a member of Mayor Michael Bloomberg's transition team, was keynote speaker at a campus conference organized by the HIV Center for Women and Children.

A Crown Heights resident and community activist for more than 40 years, Mr. Green described his experiences working with youthful offenders, many of whom are HIV-positive. "We need to open a dialog to change young people's pessimistic attitude toward AIDS—they think it's inevitable," he said. "They need to learn that calling 411 is better than 911."



Campus members gather to read the moving inscriptions hand-stitched onto panels of the AIDS quilt.



Dr. Randolph Chase, Jr., assistant professor of medicine and former chair of infectious diseases at NYU, was keynote speaker at this year's Women's Health Conference. Shown at right, he is joined by Cyrus McCalla, M.D. director of obstetrics, and Carla Petterkin-Caldwell, M.D., clinical assistant professor and conference course director.

WEB NEWS

A Healthy Downstate, the health and weight-loss program for campus employees, has a new web site. It offers advice on how to eat right by Traci Fauerbach, a registered dietician; exercise and weight management by Dr. Roseann Chelser, Division of Cardiovascular Medicine; general health information from Dr. John Fallon, senior vice president for clinical affairs; as well as other useful web links. Visit the new site at <http://www.downstate.edu/healthy>

Downstate Leads in Angioplasty

A recent report issued by the NYS Department of Health (DOH) confirms that there is no better place to go for angioplasty than University Hospital of Brooklyn. According to a study conducted by the DOH, UHB had the lowest mortality rate—zero deaths—among the 33 hospitals in New York that perform angioplasty to open blocked vessels to the heart.

"Once again, we are reminded that Brooklynites don't have to go to Manhattan for high-quality heart care," says Dr. Alan Feit, director of the hospital's Catherization Laboratory.

During angioplasty, cardiologists use catheters and a balloon to reopen blocked vessels. Because the procedure requires only a small incision, patients recover faster than they would if they had to have open-heart surgery. Whereas only 10 percent of angioplasty patients throughout the state are minority group members, at UHB roughly 50 percent are minorities.

This is the second time that Downstate has led the state in safe angioplasty since the DOH began releasing data in 1994. Dr. Luther Clark, chief of cardiology, attributes the success of the angioplasty program at Downstate to our skilled team of doctors, nurses, and technicians. "Our practitioners provide high-quality care—before, during, and after the procedure," he says. "It's a comprehensive team approach."

Hypertension Clinical Trials

Nathaniel Winer, M.D., professor of medicine, is recruiting people with high blood pressure and/or diabetes to participate in several important clinical trials.

"Hypertension occurs more often in African-Americans than in whites, leading to higher mortality rates from strokes, heart disease, and kidney failure, especially in the presence of diabetes," he explains. "Studies that examine the role of anti-hypertensive drugs will be particularly relevant to residents of our community, where hypertension, diabetes, and complications arising from these conditions are prevalent."

Ongoing and planned projects include:

- An evaluation of two new arthritis medications (COX 2 inhibitors) to determine whether they interfere with blood pressure-lowering drugs used by patients with high blood pressure, diabetes, and osteoarthritis;
- A study to determine if the combined use of two blood pressure-lowering medications (an angiotensin receptor antagonist and an ACE inhibitor) is more effective than ACE inhibitor treatment alone;
- A study to assess the effectiveness of an ACE inhibitor/calcium antagonist combination to improve vascular compliance (blood vessel stiffness) in African Americans who have hypertension and diabetes;
- A study of a new blood pressure-lowering medication (calcium blocker) using 24-hour ambulatory blood pressure.

For more information on these projects and enrollment requirements, contact Dr. Winer by phone: 270-6320, fax: 270-2699, or email: nwiner@downstate.edu

CELEBRATE NATIONAL HEART MONTH



February is a time for valentines. It's also National Heart Month. So give yourself the best valentine gift of all: better cardiovascular health. The Cardiac Screening Center at UHB offers free heart disease screening, including blood glucose and cholesterol testing, counseling on diet, medication, exercise, weight management, and more. Located in Suite C, the center is open every Wednesday, no appointment needed.

New Appointments

William Blank, MD, has joined the Department of Urology as director of andrology, which concerns all aspects of men's sexual health. Fellowship-trained at Cornell, he is an expert in erectile disorder and infertility, as well as female sexual dysfunction. Dr. Blank is on the staff of the Brooklyn VA Medical Center as interim director of the local urology program and interim chief of urology. He also serves as physician coordinator for the SUNY Downstate chapter of the national prostate cancer support group Us Too!

M. Leon Canick, MD, has been named associate professor emeritus of surgery. He recently retired after many years of dedicated service as clinical associate professor of plastic and reconstructive surgery.

NEW CHIEF OF VASCULAR SURGERY

Jonathan Deitch, MD, has joined our faculty as assistant professor and chief of vascular surgery. Dr. Deitch comes to us from Cornell University/Weill Medical College and New York Presbyterian Hospital. At Cornell, where he held a clinical vascular surgical practice and performed endovascular surgery, he developed funded research in renovascular disease and imaging modalities and directed the noninvasive vascular laboratory. He also served as chief of vascular and endovascular surgery at Jamaica Hospital.



Dr. Deitch received his undergraduate degree from Emory University and his medical degree from New York Medical College. After completing his general surgical residency at Montefiore Medical Center, he trained in vascular surgery at Wake Forest University School of Medicine, followed by an endovascular fellowship at the University of Medicine and Dentistry of New Jersey. His areas of clinical interest include aortic pathology and minimally invasive vascular procedures. His other specialties include renovascular, cerebrovascular and peripheral vascular diseases.

"One of the main reasons I decided to come here is the fact that Dr. Michael Zenilman is at the helm of surgery," he says. "Having trained under him when I was a resident, I know him to be a superb clinician, teacher, and researcher."

Dr. Deitch says he was also attracted by the opportunities for growth at Downstate. "Brooklyn has a huge underserved population but few vascular surgeons," he explains. As the borough's only academic medical center, we can provide effective treatments for vascular diseases and stroke prevention, and the latest in endovascular surgery."

As chief of vascular surgery, Dr. Deitch aims to increase the hospital's patient volume and to develop an endovascular program that offers the most modern surgical procedures, including aortic endografts, a minimally invasive way to treat aneurysms. He also plans to conduct clinical trials and research in conjunction with the

Gary Gwertzman, MD, has joined the Division of Vascular Surgery as assistant professor of surgery. After graduating from the University of Rochester, he received his medical degree from Albert Einstein College of Medicine. He completed a residency in general surgery at Montefiore Medical Center, followed by a fellowship in vascular surgery at the University of Medicine and Dentistry in Newark. Dr. Gwertzman has special interest in minimally invasive vascular surgery, carotid artery disease and stroke prevention, aortic disease, and peripheral vascular disease.

Alex Schwartzman, MD, clinical associate professor of surgery, has been named associate program director and director of surgical education. Dr. Schwartzman is a full-time attending at Long Island College Hospital. He is an outstanding educator, and we look forward to significant changes in the educational process under his leadership.

Mrudangi Thakur, MD, assistant professor of surgery, has joined the faculty as an attending in plastic surgery. Upon completing her residency at Montefiore Medical Center in June, Dr. Thakur was named Best Outgoing Resident in recognition of her outstanding academic record.

Prior to her training in plastic surgery, Dr. Thakur had a burn fellowship at Jacobi Medical Center and also trained in England at the Birmingham Accident Unit, well known for its pioneering burn treatment.

Anny Yeung, RN, MPA, CNOR, CNAA, has been appointed assistant vice president of perioperative services and associate hospital director. In addition to patient admitting, ambulatory surgery, OR, and recovery, she directs the endoscopy unit and respiratory therapy department. Ms. Yeung comes to us from Mt. Sinai Hospital, where she served as clinical director and associate hospital director of the Perioperative Service Care Center, which has 36 operating rooms. Selected among the nation's 25 outstanding perioperative nursing leaders by the AORN Foundation, she was named National OR Manager of the Year in 1999.



During National Operating Nurses Week, Anny Yeung, AVP for perioperative services, organized a reception and exhibit "to enlighten campus members about what goes on in the OR behind closed doors." She is shown here standing next to Dr. John A. Fallon, senior VP for clinical affairs. Other participants are shown in the photo at bottom: Amy Santos, RN, Blore Mardner, surgical technologist (wearing the air-conditioned suit), and Marilyn Resurrección, MD.



Kanzada Jordan lovingly admires her new daughter, Victoria, the first baby born at UHB in the new year.

Photo: Marcos Lainez

New Test for Lung Cancer

In the November issue of Focus, we described a quick and painless test to detect lung cancer at an early, more treatable stage. The Early Lung Cancer Action Program is offering free screenings at several locations throughout New York. Dr. David Gordon and his team of Downstate researchers are conducting the Brooklyn study in cooperation with Kings County Hospital.

If you are a current or former smoker and you are also at least 60 years old, in good health, and with no personal history of cancer, you may qualify for a free screening. Call 1-866-NY-ELCAP (toll-free) for more information.

Young Minds Want To Know

Dr. Kenneth Bromberg, vice chairman of pediatrics, recently presented several small group workshops on bioterrorism to seventh and eighth graders at the Packer Collegiate Institute in Brooklyn Heights. The workshops explored students' concerns in the aftermath of the World Trade Center tragedy. Dr. Bromberg is working with the health department in the hope of providing similar workshops to the public.

Healing through Laughter

On March 7, the Pediatrics Department will be sponsoring a fundraiser at the Brooklyn Museum to benefit the Children's Hospital of Brooklyn. Promising to be a big success, it will feature the well-know comedian Rober Klein, courtesy of the Toyota Comedy Festival's Laugh Well Program.

The Laugh Well Program sends comedians, clowns, and other performers to hospitals throughout the city. Recently, they sent a talented cartoonist to entertain some children receiving treatment at Downstate's Dialysis Center. To their delight, he drew a story cartoon for each of them based on their initials. The children's laughter proved once again that it is the best medicine.



This young patient has just finished a dialysis treatment, so why is he smiling? Because volunteers from Toyota's Laugh Well Program helped him forget all about it.



Good witch Laurel Whitaker, director of the Child Life Program, joins young patients, parents, and staff in enjoying a bit of Halloween fun made possible through the generosity of J.P. Morgan-Chase.

Congratulations

James E. Cottrell, M.D., professor and chair of anesthesiology and senior associate dean for clinical practice, is president-elect of the American Society of Anesthesiologists. He will assume the position of president in October 2002.

Eugene B. Feigelson, M.D., dean of medicine and senior vice president for biomedical education and research, recently assumed his elected position as president of the Associated Medical Schools of New York.

Sarah Marshall, R.N., received a Community Health Service Award from Assemblyman Nick Perry for her contributions to community health education, especially in the areas of iodine deficiency disorders and breast health awareness.

Mohammed A. Q. Siddiqui, M.D., chair of anatomy and cell biology, spoke at the Keynote Symposium on JAKs and STATs: Activation and Biologic Impact, held in Utah in January. He will travel to St. Petersburg in July, to give a talk at the International Symposium on Reactive Oxygen and Nitrogen Species: Diagnostic Preventive and Therapeutic Values, sponsored by the Society for Free Radical Research International

David Wlody, M.D., clinical associate professor of anesthesiology, has been appointed vice chair of clinical affairs within the Department of Anesthesiology.

MORE THAN A CENTURY OF ALUMNI SUPPORT

Downstate has produced more than 13,000 alumni since 1860, when Long Island College Hospital, our predecessor institution, founded the first hospital-based medical school in the country. The Alumni Association was established 30 years later and continues to carry out its mission to serve students and the College of Medicine.

Jill Ditchik, the association's executive director, notes that "our purpose is to be here for medical students and to assist them, both financially and programmatically."

Each year the association grants tuition scholarships, summer research fellowships, and travel stipends for students studying health care in developing countries. It provides support for Match Day, the White Coat ceremony, Gem lectures, and AOA, the national medical honor society. In addition, it gives assistance to the Daniel Hale Williams Society, student activities, service awards, and the graduation dinner. During the current academic year, the Alumni Association contributed \$300,000 for these activities and special requests. For example, when advised that students needed additional microscopes and new lockers, the Alumni Association supplied them, as well as funds for the medical library.

Another successful initiative, the Mentoring Program, is offered in conjunction with the Office of the Dean of Medicine. This year the program attracted 341 participants, including 79 faculty, 186 first-year students, and 76 second-year students. Faculty members meet with students to offer advice on residency programs, research topics, and other areas of interest. Peer mentors who have completed the first-year curriculum also offer valuable advice on study habits and managing the workload.

"The association is gratified that our programs have been such positive experiences for everyone involved," says Ms. Ditchik.



Alumni Association members and faculty congratulate medical students who have been selected to receive International Health Fellowships. Awarded each year by the Alumni Fund, the fellowships defray the travel costs of students who participate in the Department of Preventive Medicine and Community Health's summer elective, "Health Care in Developing Countries."

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Brian Kell
Doris Youdelman
Dorcas Gelabert
Ernest A. Cuni

Assistant Vice President
Editor
Design
Photography



Be a contributor. Send news for FOCUS by e-mail to dyoudelman@downstate.edu