Our students, faculty, alumni serve at home—and around the world
Rounds-trip
See the world through the eyes of our students, faculty and alumni

Medical College of Georgia Medicine welcomes submissions to the Viewpoints column. Typed essays (approximately 750 words) on healthcare issues should be submitted to:
Damon Cline, Editor
Medical College of Georgia, Fl-1044
Augusta, GA 30912
dcline@mcg.edu
706-721-4706 phone
800-328-6057 fax
School mission clear despite dizzying times

Vertigo (vûr’ti-gō’) n., 1. The sensation of dizziness and the feeling that oneself or one’s surroundings are whirling about. 2. A jumbled, disoriented state of mind.

From the Dean  
D. Douglas Miller, M.D., C.M.

The Medical College of Georgia School of Medicine has been on an upward trajectory, as last fall’s inaugural edition of Georgia Medicine made clear. In fall 2008, we stood together at the peak of various performance curves, including peer-group research rankings, faculty academic accomplishments and student educational innovations. Like climbers cresting a summit, we were permitted a little giddiness related to these successes.

However, in the 9th Edition of the International Classification of Diseases, giddiness and dizziness are associated with diagnosis code 780.4: vertigo, the illusion of movement that can result from disorders in the brain, inner ear or vestibular nerve and may be prodromal of serious diseases, such as focal epilepsy. In French, vertigo is “mal de débarquement,” an imbalance that can occur after stepping off a boat or plane.

In spring 2009, as we step from a successful past to a future of fiscal uncertainty and financial retrenchment, how do we prevent progression from prodrome to full-blown disease — from giddiness to vertigo?

Business literature is replete with references to organizational inertia — a firm’s resistance to change in its state of motion. As this edition of Georgia Medicine shows, the School of Medicine is still on the move. But if an organization is subject to inertia, can it also experience vertigo — the illusion of movement?

Given most states’ downward revenue spiral, the unknown impact of the national economic stimulus plan and institutional investment losses, there are ample triggers for a public university such as MCG to experience objective vertigo — a sensation that the world is swirling around it. Mandated budget cuts and hiring freezes can be organizationally destabilizing, causing subjective vertigo — the sensation one is revolving in space.

What then, is the treatment plan?

First, let’s “keep the main thing the main thing.” We are chartered as a school to educate medical students; our bedrock is full program accreditation by the Liaison Committee on Medical Education. This is now and must remain “Job 1.” Second, our azimuth must look upward to the horizon, not into the valleys and crevasses that loom below. Our state is simultaneously growing and becoming more disease-burdened; our clinical service and research resources must align for us to navigate a true course on behalf of the state. Third, because a team of climbers lashed together cannot fall — even as one member grows dizzy — we must securely link our programs to shore up those individuals on unsure footing. Our Discovery Institutes (see Pages 18-19) are an example of this team based-thinking.

Now is the time to stabilize around core principles and values: mutual respect, individual dignity and professionalism.

Getting a little dizzy? Let our school’s clear response to an uncertain future, as recorded in Georgia Medicine, give you a dose of reality and eliminate any illusions.
The Georgia Health Sciences University Foundation board met in March at the MCG Cancer Center: (back row from left) Dr. Joseph Hobbs, H. Montague Osteen, Betty H. Meehan, William R. Bowes, Dr. Annette Rainge, Dr. Betty B. Wray, Elizabeth C. Ogie and Debbie Layman. (front row from left) Donald F. Snell, Dr. Daniel W. Rahn, Dr. E. Dan DeLoach, Dr. Paul Isler, Clayton P. Boardman III and Robert C. Osborne. (Not shown: Dr. William P. Brooks, Phil S. Jacobs and Dr. Samuel B. Kellett)

**Drs. Rahn, Miller listed in Georgia Trend magazine**

MCG President Daniel W. Rahn was named one of Georgia Trend magazine’s 100 Most Influential Georgians in its January 2009 edition.

Dr. D. Douglas Miller, dean of the School of Medicine, was listed in the Notables section of the same issue.

Dr. Rahn, senior vice chancellor for Health & Medical Programs for the University System of Georgia, was cited for leading the “expansion of satellite medical and pharmacy education programs, training opportunities for allied and behavioral health professionals and increased dental and medical education.”

The annual list compiled by the magazine’s editorial staff spotlights prominent figures in business, politics, government, science and education.

**MCG’s new foundation begins operation**

The Georgia Health Sciences University Foundation Inc., chaired by Clayton P. Boardman III, has begun receiving charitable gifts on behalf of the Medical College of Georgia and MCGHealth, Inc. The GHSU Foundation, the official MCG-affiliated foundation, supports the school’s mission and vision as MCG expands medical education in Augusta and beyond.

The need to bring in private dollars likely has never been more compelling as MCG works to expand the number of medical students 60 percent by 2020 to meet the state’s future health care needs. Currently, public funds cover 26 percent of the university’s $610 million budget and about 8 percent of MCGHealth’s.

Mr. Boardman chaired the forerunner to the GHSU Foundation, MCG Real Estate Corp., which helped the university acquire adjacent property for expansion, including a 3.79-acre lot on Laney-Walker Boulevard and the 15-acre tract formerly occupied by the Gilbert Manor public housing complex.

Board members include:

**Officers**
Clayton P. Boardman III, chairman
Robert C. Osborne, secretary
H. Montague Osteen, treasurer

**Members**
Dr. William P. Brooks
Dr. D. E. Dan DeLoach
Dr. Paul Isler
Phil S. Jacobs
Dr. Samuel B. Kellett
Elizabeth C. Ogie
Dr. Betty B. Wray

**Ex-officio**
William R. Bowes
Betty H. Meehan
Dr. Daniel W. Rahn
Donald F. Snell

**Advisory trustees**
Dr. Joseph Hobbs
Debbie Layman
Dr. Annette Rainge

For more information on the GHSU Foundation, visit www.ghsuf.org or call 706-721-4003 or 1-800-869-1113.
State, national leaders gather for GME summit

Medical educators, health care executives and policy-makers from across Georgia and the nation attended the School of Medicine-sponsored Graduate Medical Education Leadership Summit in Atlanta in October.

Participants in the summit, designed to develop a statewide strategy for expanding graduate medical education, included Georgia’s four other medical schools – Emory University School of Medicine, Mercer University School of Medicine, Morehouse School of Medicine and Philadelphia College of Osteopathic Medicine. All Georgia schools are in varying stages of expanding class sizes but have no plan to boost residency slots for the students after graduation.

Expanding graduate medical education is essential to growing the state’s physician workforce because many residents practice medicine in the cities where they trained; Georgia ranks 14th in the nation for retention after training, according to the American Medical Association. Georgia also ranks 37th in medical residents per 100,000 citizens. Officials project at least 200 new residency positions need to be created in Georgia by 2020 to ensure an adequate supply of new physicians.

The summit, which featured a panel of national experts on graduate medical education expansion, has prompted Georgia’s elected officials and health care stakeholders to begin a collaborative dialogue to create public policy addressing a future shortfall in physician training.

“It’s a statewide challenge that requires a statewide solution that lends itself well to a statewide consortium management approach,” School of Medicine Dean D. Douglas Miller said. “We hope MCG School of Medicine’s organization of this summit demonstrates our commitment to moving this process forward and our sense that time is of the essence as it relates to expansion and the health needs of the state.”

Administrative changes include School of Medicine

Recent organizational changes at MCG have supplemented Dr. D. Douglas Miller’s role as School of Medicine dean with the role of senior vice president for health affairs. He will align the university’s clinical activities with education programs and provide strategic leadership for MCG’s research programs.

Dr. Frank Treiber, vice president for research, has the new title of vice president for research development and will report to Dr. Miller.

Research administration will remain under the purview of Provost Barry Goldstein.

The changes, announced in December by President Daniel W. Rahn, will foster interdisciplinary collaboration across academic, research and clinical programs and reflect structures at peer institutions and the other University System of Georgia research universities, Dr. Rahn said.
School of Medicine to participate in 2009 Millennium Conference

The MCG School of Medicine is one of nine medical schools selected to participate in a national conference aimed to improve clinical education for North American medical students through innovation.

The 2009 Millennium Conference, sponsored by the Carl J. Shapiro Institute for Education and Research at Harvard Medical School, Beth Israel Deaconess Medical Center and Blue Cross Blue Shield of Massachusetts, is titled “Patient Safety – Implications for Teaching in the 21st Century.” The goal will be to generate concrete educational strategies to teach and evaluate patient safety throughout undergraduate and graduate medical education.

Medical schools nationwide are chosen by a competitive application process. MCG’s School of Medicine has participated in two previous Millennium Conferences. The 2009 conference will be May 7-9.

Representing MCG will be Dr. Ruth-Marie E. Fincher, professor of medicine and vice dean for academic affairs; Dr. Valera L. Hudson, associate professor of pediatrics, vice chair for education in the Department of Pediatrics and pediatric residency program director; Dr. Stewart A. Shevitz, professor of psychiatry and health behavior and director of psychiatric education and training; Dr. Christopher A. Fly, assistant professor and clerkship director in the Department of Emergency Medicine; and Patricia Sodomka, senior vice president of patient- and family-centered care for MCG and MCGHealth, Inc.

Dr. Mei named IMMAG director

Dr. Lin Mei, chief of developmental neurobiology in the Institute of Molecular Medicine and Genetics, has been named institute director.

Dr. Robert K. Yu, who has served as IMMAG director since 2000, will pursue his studies of neurochemistry, glycobiology and neuropathy, which have been funded by the National Institutes of Health continuously for 34 years.

The 15-year-old IMMAG, established to support interdisciplinary and translational science, is one of MCG’s largest institutes and includes programs in nanomedicine and gene regulation, regenerative medicine, developmental neurobiology and reproductive medicine.

“Dr. Mei is a distinguished scientist at the forefront of the field of brain development and neuronal communication. His accomplishments spring from the ability to see where this field of neuroscience is headed and to organize complex research efforts and teams to get there. These abilities make him a great choice to direct a major research institute at this unprecedented time of scientific complexity, competition and excitement.”

— Dean D. Douglas Miller

Dr. Mei, a Georgia Research Alliance Eminent Scholar in Neuroscience and professor in the MCG School of Medicine, came to MCG in 2004 from the University of Alabama at Birmingham. He received a 2008 Distinguished Investigator Award from NARSAD, the world’s leading charity dedicated to mental health research, for his pioneering studies of brain cell communication in schizophrenia.

“Dr. Mei is a distinguished scientist at the forefront of the field of brain development and neuronal communication,” Dean D. Douglas Miller said. “His accomplishments spring from the ability to see where this field of neuroscience is headed and to organize complex research efforts and teams to get there. These abilities make him a great choice to direct a major research institute at this unprecedented time of scientific complexity, competition and excitement.”
New chairs, Regents Professors honored

The MCG School of Medicine recognized the appointment of its newest department chair and Regents Professors at the Department Chair Investiture Ceremony in December at the Paul S. Simon Discovery Theater.

Dr. Michael P. Madaio, who in August was named Charbonnier Professor and chair of the Department of Medicine, the school’s largest department. Dr. Madaio, a clinician and investigator who pursues causes and novel therapies for autoimmune and inflammatory kidney disease, was previously Temple University’s chief of nephrology and kidney transplantation and professor of medicine, microbiology and immunology.

The event recognized Dr. Michael P. Madaio during the Investiture Ceremony. The pin depicts the stained glass window in the Kelly Administration Building, presented by Mercer and Ethel Sell to honor Dr. E. James McCranie, a professor and chair of the Department of Psychiatry from 1958 to 1979.

Dr. Madaio was a faculty member at the University of Pennsylvania School of Medicine from 1991-2006. His positions included leading a project on molecular mechanisms of renal inflammation and injury; serving as interim division chief of the school’s Renal-Electrolyte and Hypertension Division; and directing the school’s Renal Training Program.

The School of Medicine also honored its most recent Regents Professors: Dr. Sally S. Atherton, chair of the Department of Cellular Biology and Anatomy; Dr. Darrell W. Brann, professor and director of the graduate program in neuroscience and associate director of the Institute of Neuroscience; Dr. Gregory A. Harshfield, a professor in the Schools of Medicine and Graduate Studies and director of the Georgia Prevention Institute; and Dr. David M. Pollock, renal physiologist and professor in the Vascular Biology Center.

Regents Professorships, selected by the University System of Georgia Board of Regents, honor internationally renowned faculty from the state’s four research universities. The award requires the unanimous recommendation of the university’s president, the dean of the graduate school, the administrative dean, the academic dean, and three other faculty members named by the president.

Approval of the chancellor and the University System’s Committee on Education, Research and Extension also is required.

Faculty inducted into Academy of Medical Educators

Ten MCG School of Medicine faculty were inducted into the Academy of Medical Educators in December.

The academy recognizes sustained excellence in education and promotes educational excellence, innovation and scholarship. Members are chosen through a peer-review process based on teaching excellence and outstanding accomplishments in related areas.

Dr. Chris White, associate dean for faculty development and educational achievement in the School of Medicine, patterned the academy after similar ones at the University of California in San Francisco, Harvard University and Baylor University.

The inaugural induction ceremony featured Dr. Molly Cooke, director of the University of California, San Francisco Haile T. Debas Academy of Medical Educators, as the keynote speaker.

The inductees are:
- Dr. Ralph A. Gillies, associate professor of family medicine and assistant professor of psychiatry and health behavior
- Dr. Hartmut Gross, professor of emergency medicine
- Dr. Valera L. Hudson, associate professor of pediatrics
- Dr. Lisa E. Leggio, associate professor of pediatrics
- Dr. D. Scott Lind, professor and section chief of surgical oncology
- Dr. John D. Mellinger, professor and section chief of gastrointestinal surgery
- Dr. Walter J. Moore, professor of medicine and senior associate dean for graduate medical education
- Dr. Carol A. Nichols, assistant professor of cellular biology and anatomy
- Dr. Andria M. Thomas, associate professor of medicine and associate dean for evaluation
- Dr. Peggy J. Wagner, professor and research director of family medicine and director of the School of Medicine Clinical Skills Program.
Like most American medical students, Katie Keown grew up without experiencing poverty. Her needs, basic and otherwise, have always been met. She has never known what it is like to be ill without someone there to help.

And that is exactly why the third-year MCG School of Medicine student chose to fulfill her elective pediatrics rotation at a Peruvian orphanage for sick children during January.

She had been on overseas medical trips before, but never for so long and never alone in a country where she wasn’t fluent in the native tongue.

“It was definitely character-building,” she said.

The orphanage, known in Peru as a “Hogar,” is run by a U.S.-born physician in the town of Chaclacayo. Its 60 children have illnesses ranging from cerebral palsy and leukemia to tuberculosis and neurocysticercosis, a parasitic brain infection commonly caused by eating undercooked pork.

Katie got to see diseases she had only read about in textbooks and she learned Spanish, but the most important thing she gleaned from the trip was a lesson in humanity.

“With all the affluence in this country, it’s easy to get caught up in unimportant things,” she said. “Every time you go to another country, you come back with a different perspective. It was a very humbling experience.”

Her experience was memorable, but by no means unique – she is just one of many School of Medicine students, faculty and alumni who participate in international medicine projects year-round. The exact number is unknown because, in addition to taking institutionally affiliated international service trips, students are arranging their own global medicine excursions through student groups, nonprofit charities and faith-based organizations.

“By the time our students graduate, I’d say at least 30 percent of them have gone on an international medical trip,” said Dr. W. “Ted” Kuhn, a professor of emergency medicine and pediatrics, who, along with his wife, Dr. Sharon Kuhn, associate professor of family medicine, organize nearly a dozen student trips each year.

Like most American medical students, Katie Keown grew up without experiencing poverty. Her needs, basic and otherwise, have always been met. She has never known what it is like to be ill without someone there to help.

And that is exactly why the third-year MCG School of Medicine student chose to fulfill her elective pediatrics rotation at a Peruvian orphanage for sick children during January.

She had been on overseas medical trips before, but never for so long and never alone in a country where she wasn’t fluent in the native tongue.

“It was definitely character-building,” she said.

The orphanage, known in Peru as a “Hogar,” is run by a U.S.-born physician in the town of Chaclacayo. Its 60 children have illnesses ranging from cerebral palsy and leukemia to tuberculosis and neurocysticercosis, a parasitic brain infection commonly caused by eating undercooked pork.

Katie got to see diseases she had only read about in textbooks and she learned Spanish, but the most important thing she gleaned from the trip was a lesson in humanity.

“With all the affluence in this country, it’s easy to get caught up in unimportant things,” she said. “Every time you go to another country, you come back with a different perspective. It was a very humbling experience.”

Her experience was memorable, but by no means unique – she is just one of many School of Medicine students, faculty and alumni who participate in international medicine projects year-round. The exact number is unknown because, in addition to taking institutionally affiliated international service trips, students are arranging their own global medicine excursions through student groups, nonprofit charities and faith-based organizations.

“By the time our students graduate, I’d say at least 30 percent of them have gone on an international medical trip,” said Dr. W. “Ted” Kuhn, a professor of emergency medicine and pediatrics, who, along with his wife, Dr. Sharon Kuhn, associate professor of family medicine, organize nearly a dozen student trips each year.

Like most American medical students, Katie Keown grew up without experiencing poverty. Her needs, basic and otherwise, have always been met. She has never known what it is like to be ill without someone there to help.

And that is exactly why the third-year MCG School of Medicine student chose to fulfill her elective pediatrics rotation at a Peruvian orphanage for sick children during January.

She had been on overseas medical trips before, but never for so long and never alone in a country where she wasn’t fluent in the native tongue.

“It was definitely character-building,” she said.

The orphanage, known in Peru as a “Hogar,” is run by a U.S.-born physician in the town of Chaclacayo. Its 60 children have illnesses ranging from cerebral palsy and leukemia to tuberculosis and neurocysticercosis, a parasitic brain infection commonly caused by eating undercooked pork.

Katie got to see diseases she had only read about in textbooks and she learned Spanish, but the most important thing she gleaned from the trip was a lesson in humanity.

“With all the affluence in this country, it’s easy to get caught up in unimportant things,” she said. “Every time you go to another country, you come back with a different perspective. It was a very humbling experience.”

Her experience was memorable, but by no means unique – she is just one of many School of Medicine students, faculty and alumni who participate in international medicine projects year-round. The exact number is unknown because, in addition to taking institutionally affiliated international service trips, students are arranging their own global medicine excursions through student groups, nonprofit charities and faith-based organizations.

“By the time our students graduate, I’d say at least 30 percent of them have gone on an international medical trip,” said Dr. W. “Ted” Kuhn, a professor of emergency medicine and pediatrics, who, along with his wife, Dr. Sharon Kuhn, associate professor of family medicine, organize nearly a dozen student trips each year.
A UNIQUE EXPERIENCE

Aside from the cultural experience and earning academic credit, international medical service gives students the chance to see diseases that wreak havoc worldwide but are almost never encountered in modern, industrialized nations.

“You could spend your entire four years at MCG and never see a case of malaria. Measles continues to cause more pediatric deaths than any other single infectious agent, but you will probably never see a case at MCG,” said Dr. Kuhn, who co-authored the book *Global Medical Missions: Preparation, Procedure, And Practice*, with his wife and Dr. Hartmut Gross, an MCG professor of emergency medicine.

The Kuhns and Dr. Gross have accompanied hundreds of student volunteers to countries such as Haiti, Ethiopia, Kenya, Honduras and Trinidad during the past several years, making the group one of the school’s two main conduits for international elective rotations.

The other is Dr. Daron Ferris, whose CerviCusco women’s clinic in Cusco, Peru, enables MCG medical, physician assistant and nursing students to provide gynecological care to a population where cervical cancer is the leading cause of cancer-related death among women aged 16-65, largely because of a lack of access to Pap smears.

Dr. Ferris established the year-round clinic last year with leftover grant funds. His connection to Peru began 10 years ago, when he started doing research with the country’s government-run cancer hospital in Lima. Though it was built for a paltry $29 per square foot, CerviCusco is as modern and comfortable as an OB/GYN private practice facility in the United States, said Dr. Ferris, adding that it is currently MCG’s only international campus site.
Nestled in the Andes Mountains, rural villagers will endure 10-hour bus rides to visit the clinic, Dr. Ferris said. Its proximity to Machu Picchu, the famous “lost city” of the Incan empire, allows the student volunteers to be tourists after completing their rotation.

CerviCusco evolved from many years of volunteer humanitarian efforts in rural Peru, and altruism remains a major component of the experience for students and faculty who go there.

“Coming back on the plane, you almost feel guilty because you feel so good about helping these people who would have never had a chance,” Dr. Ferris said. “Anyone who has ever gone down there with you becomes an instant friend because you’ve shared something in your hearts together.”

Dr. Kuhn, who has been going on international medicine trips for the past 37 years, said he is seeing unprecedented interest among students to provide humanitarian service overseas.

“During the last two or three years, students nationwide have really demanded that universities provide more global outreach,” he said. “There really continued on 10

Josh Zaffos: Seeing more clearly

When most people say they have “been to” a country, they usually mean they have been to a city in that country or, at most, a small region. But when Josh Zaffos says he has been to Ghana, he really means it.

The second-year MCG School of Medicine student spent five weeks last June criss-crossing the west African nation to provide eye exams to villagers through the nonprofit NGO Unite For Sight, a volunteer vision screening organization started by a Yale University sophomore in 2000.

“It wasn’t like we went to one place and set up shop,” he said. “We definitely traveled around a lot.”

Josh was on one of two teams who screened more than 350 patients a day, which consisted of non-stop work from approximately 8 a.m. to 7 p.m. They dispensed eyeglasses and medication and performed cataract surgery on people who had never undergone an eye exam.

He said his only regret about his first international service trip is not being able to help everyone, including children who, if they were living in the United States, could have their blindness reversed by a simple cornea transplant. Others were beyond help.

“We saw a handful of patients blinded at a young age from a simple vitamin A deficiency, and that’s irreversible,” Josh said. “Their mother will ask, ‘Can’t you give them glasses?’ It was hard telling them there is nothing you can do. You want to help everyone, but you can’t.”

He called his first international medical trip a “life-changing experience,” one that he hopes to repeat many times in the future.

“I hope I can go over once a year and establish relations with physicians there and make a difference,” he said. “The people there are wonderful. The whole experience was rewarding and it was a nice reminder of why I went into medicine to begin with.”
Dr. Richard Kauffman: Epidemic in Cambodia

Dr. Richard Kauffman heard loud music played throughout the cities and towns of Cambodia during his visit there in 2004. The songs were for funerals.

“You could hear that music almost constantly every day,” the 1976 School of Medicine graduate said. “People were dying that fast.”

Less than a generation after the brutal Khmer Rouge regime wiped out nearly one-fifth of the country’s population, Dr. Kauffman arrived to find the country in the throes of another crisis: HIV/AIDS.

Much like the HIV/AIDS epidemic in Africa, the disease spread rampantly through heterosexual intercourse, causing children to be born with the infection. Dr. Kauffman, an internist practicing in northwest Atlanta, went to Cambodia through the nonprofit International Center for Equal Healthcare Access. His mission was to prepare the country’s physicians for the arrival of highly active antiretroviral drugs, a strict drug regimen that allowed HIV/AIDS patients in the United States to lead fairly normal lives.

“Over there, that wasn’t the story,” Dr. Kauffman said, adding that he saw numerous cases of diseases rare in the Western world, such as Cryptococcus meningitis and Penicilliosis. “We saw an unbelievable array of opportunistic infections we don’t see anymore. If a physician wanted to learn about infectious disease, then that was the place to go.”

Dr. Kauffman, who went on medical trips to Honduras and Ecuador while he was a student and resident at MCG, said the death toll in Cambodia from HIV/AIDS has fallen dramatically since the importation of antiretroviral drugs from India.

Though he hasn’t been back to southeast Asia since he volunteered to conduct a two-day conference for HIV/AIDS in neighboring Vietnam, he keeps a very personal connection to the country by supporting an 11-year-old orphan boy named Em Tear whom he met while working in the remote Banteay Meanchey province.

Em, then 7, had lost both parents to HIV/AIDS. He did not know his birth date, so Dr. Kauffman picked Nov. 20, the day he arranged to have him placed in an orphanage eight hours away in Phnom Penh.

“That’s a typical story,” Dr. Kauffman said. “There are so many HIV orphans in Cambodia.”

EXPANDING the GLOBAL FOOTPRINT

Though MCG students and faculty log substantial international mileage each year, the planning, coordination and funding of the trips is disjointed when compared to peer institutions, some of which have formal international medicine departments that help prepare students for travel abroad.
“There are many things that need to be taken care of,” Dr. Ferris said.

Considerations include things that most people tend to think of – packing medications, getting immunizations and obtaining travel documentation (passports and, depending on the country, visas) – but also purchasing medical evacuation insurance and understanding the physical rigors of the destination.

“Where we go in Peru, the altitude is such that it might pose a risk to somebody with asthma or cardiovascular disease,” he said.

Those who organize international medicine excursions offer pre-trip briefings and informational sessions, but students, faculty and administrators agree MCG’s expanding international medicine initiatives could be better managed through a central clearinghouse. That’s why there are discussions to create an on-campus international medicine office to serve as a resource for students interested in global health excursions.

Russ Ayers, a 2007 alum now in his medical residency in Greenwood, S.C., with a young village girl in Ethiopia.

Gehres Paschal: Taking a leadership role

Gehres Paschal had already been on overseas medical trips before she enrolled in the MCG School of Medicine in 2005. She created the organization, Students for International Healthcare, while majoring in biology at the University of Georgia. Gehres spent a total of 18 months living in Nicaragua and Guatemala teaching local “health promoters” preventive medicine before enrolling at MCG. Since then, she has done work in southern Kenya.

As a first- and second-year MCG student, she helped lead the effort to bring organization and structure to what has largely been an informal and decentralized process of international medical service on campus. Amid her busy third-year rotations, she remains an advocate.

“Many students would like to see things more organized and have more university support,” said Gehres, an officer with MCG’s Students for Intercultural Medicine, founded in 1991 to help students find international elective and medical service opportunities. It also organizes fundraisers to help pay for the trips.

Many students she has traveled with have previous overseas experience, but she enjoys being with students who are on their first international service trip.

“I think they learn a lot about themselves, and why it is they want to practice medicine,” Gehres said. “When you take away all the modern facilities, all the technology and it’s just you helping another human being, it’s such a pure experience. It’s a beautiful thing.”

She is leaning toward a specialty in pediatrics, but whatever she chooses, she wants to continue international service throughout her career.

“I want to choose a path that will allow me to do this most of the time,” she said.

"Right now I think medical students are perhaps more interested in the world because of Internet communication and awareness of global relationships."

—DR. JOHN HARDMAN
In fact, development of the office is being coordinated through the Office of the President’s newly created Work Group concept, which is designed to fast-track the implementation of initiatives considered to be institutional priorities.

The proposed international medicine office evolved out of broader Work Group discussions on the topic of diversity, specifically the need to teach students “cultural competence,” said Annie Burrell, special assistant to the president. She said she expects the office to be established before the start of the fall semester.

“The students are pretty pumped about this,” she said. “They really want to make this happen.”

Dr. Cibirka, who has traveled to 52 countries during the past three years, is working with the task force of students, faculty and administrators. He said he believes international education is important because students are more likely to come face-to-face with illnesses that previous generations of physicians have never seen.

“The diseases students are seeing in some of these countries will appear here some day on somebody’s patient list,” he said. “So if you think about it, the concept of expanding our global outreach is aligned with our institutional theme.”

Dr. Kuhn agrees.

“To practice good medicine in Georgia, you need to have a global perspective. Atlanta, for example, has a large population from Ethiopia and Sudan,” he said. “Georgia has people from all over the world. The world has literally come to Georgia.”

---

**Dr. Donald M. Gilner: The volunteer next door**

Sometimes you don’t have to leave America’s borders to find large numbers of people in dire need of medical attention. Dr. Donald M. Gilner, a 1964 School of Medicine graduate, learned that firsthand during Hurricane Katrina in 2005.

The Sandy Springs, Ga. resident, who retired from his allergy, asthma and immunology practice in 2001, volunteered through the Fulton County unit of the U.S. Medical Reserve Corps, which received 100,000 displaced Louisiana residents at four “megacenters” outside Atlanta.

“That was a real experience, I tell you,” Dr. Gilner said. “We had a lot of people with high blood pressure, diabetes. Most of them didn’t have their medicine and some didn’t even know what kind of medicine they were on…One guy came in with gangrene, so he was taken to the hospital right away.”

But volunteerism isn’t new for Dr. Gilner. He made four trips to Honduras through a Christian medical missionary group after retiring as a colonel in the U.S. Air Force Reserves in 1997 after a 32-year career. He and his wife, Celia, a registered nurse who volunteered to work during Hurricane Gustav in 2008, both worked pro bono at the Fort McPherson army base.

“It was a privilege to continue serving the military, especially at this time when most have served in combat areas,” he said.

During his Honduras mission, he said villagers would have died without his intervention.

“I can tell you there was one lady who would have died within two hours if I hadn’t been there,” he said. “That’s the kind of thing you don’t necessarily see in a private practice.”

Dr. Gilner, a first-generation American whose parents were Polish Jews, considers pro bono work to be a tenet of his faith as well as a responsibility to his country.

“First of all, I believe you grow spiritually by doing this. Whether you’re Jewish or not, it’s spiritually rewarding to help people who can’t help themselves,” he said. “Secondly, I am fortunate to be in the most wonderful country in the world, and I have an obligation to do whatever I can for the people of this country.”

---

**COURTESY OF THE GILNER FAMILY**

Dr. Donald Gilner with wife Celia during a medical trip to Honduras.
Not all of the volunteering done by MCG School of Medicine students and faculty involves an overnight bag.

Many participate in the dozens of programs and initiatives around campus and around the state, ranging from the weekly clinic for the homeless at Augusta’s Salvation Army facility to annual health screenings for migrant workers in Vidalia.

“When you look at the amount of volunteerism that the entire medical college does, it is really tremendous,” said Dr. Andy Albritton, School of Medicine associate dean and faculty advisor of MCG’s Migrant Farm Worker Initiative.

The homeless clinic, one of MCG’s oldest outreach programs, was started in 1989 by students and faculty in the Department of Family Medicine. The clinic, known officially as the MCG Students’ Health Care Clinic for the Homeless, is operated every Monday night through a partnership with the Salvation Army.

The clinic is staffed year-round by students doing third-year clerkships and fourth-year electives. Funding for the free clinic is provided through a trust fund as well as grants from the Richmond County Division of Public Health, University Hospital and St. Vincent de Paul Society. Prescription medication is provided at cost by Maxwell House Pharmacy.

Two other clinics are operated every other week at the facility on Greene Street in downtown Augusta: a clinic specifically for homeless women and a clinic for indigent Latinos.

Dr. Bruce M. LeClair, an associate professor of family medicine in the School of Medicine, is the clinic’s course director. He said students generally see patients with routine ailments, such as infections and rashes, but that some have more serious conditions, such as diabetes and hypertension.

Dr. LeClair said the value of the clinic to students goes far beyond educational.

“Seeing the adversity these people face makes them want to continue doing volunteer work,” he said. “We find that students who work at the clinic are more likely to include indigent care in their practices when they become physicians. Some students have even asked how they can go about starting up a similar clinic.”

When the e-mail went out seeking student volunteers for MCG’s annual mobile clinic for migrant farm workers in Vidalia, Ga., it didn’t take Dewitt Pittman long to sign up. It wasn’t just a learning opportunity, it was a chance to go home.

The second-year School of Medicine student is from the south Georgia town famous for its namesake sweet onion, and as a youth, he earned pocket money in the fields working alongside the migrant farm hands.

“When you go into medicine, you always think that one day you’ll get to go home and make a difference,” he said. “Well, these are the people who need a difference made.”

MCG’s Migrant Farm Worker Initiative takes place during the height of the spring onion harvest. Students and physician volunteers provide basic health screenings, assessments and medications. They work with East Georgia Health Care, a non-profit medical facility that serves rural areas, and the Southeast Georgia Communities Project, a non-profit organization providing assistance to low-income families, particularly Latinos and farm workers.

The patients are generally males age 16 and 55 and, as one would expect, poor.

“I’m afraid in a lot of cases, we’re the only medical contact they will have until they come back next year,” Dewitt said. He said he is looking forward to this year’s clinic because he is more fluent in Spanish, having spent a month volunteering at a hospital in Bolivia last summer.

Bilingualism will come in handy if Dewitt achieves his goal of practicing emergency medicine in Georgia, which has the nation’s 11th largest Latino population.

“Hispanics are the fastest-growing demographic,” he said. “Being able to communicate with patients in a medical setting is paramount.”
The third-year student in the Medical College of Georgia’s School of Medicine recently completed this rotation in the Department of Family Medicine’s required third-year clerkship program.

The nationally known program, now entering its third decade, gives students a taste of what it’s like outside of an academic medical center – where a large portion of health care is provided by community-based primary care physicians.

“It gives us a real feel for how the front lines of medicine operate,” Mr. Mikell said.

That experience is exactly what educators had in mind when they created the clerkship program in 1980, said Dr. Joseph Hobbs, chair of the Department of Family Medicine.

“Medical schools have traditionally used their own backyard to teach their students, but that backyard often doesn’t look like the reality of practice in the community,” he said. “The vast majority of students will eventually go into a community practice, whether they go into family medicine, primary care or other specialities, so they need to see how community practices really work.”

Crucial to the program’s success are the 75 community primary care physicians, who along with MCG’s Family Medicine faculty, oversee students during the intensive six weeks they spend at one of 22 clerkship teaching sites throughout the state. The sites range from group practices in rural and suburban areas and include a community health center network and MCG’s Family Medicine faculty practice. There also are two community-based residency programs and a military-based residency program.

The community physicians are more than traditional “preceptors” – they are associate faculty members in the Department of Family Medicine. They, along with the academic faculty, are responsible for helping develop and implement major parts of the program’s curriculum.

“We’ve put together a unique curriculum of what we think students ought to see during those six weeks,” said Dr. Jon Reimer, an Augusta physician who oversees Mr. Mikell’s clerkship. “We meet each year and refine it to make sure the clerkship is as much like the real world as possible.”

Dr. Reimer, who last year was named Educator of the Year by the Georgia Academy of Family Physicians, has
participated in the clerkship program since its inception. Clerkship coordinator Libby Poteet said Dr. Reimer’s length of service is not unusual in the program.

“Most of them have been with us for many, many years,” she said. “They really have ownership of the program because they were involved early in its creation.”

The alliance forged between the Department of Family Medicine and its network of community-based physicians has developed into a model that has since been replicated at other medical schools across the country.

“It clearly continues to be a model nearly three decades after its inception,” said Dr. Elizabeth Garrett, predoctoral director for the University of Missouri’s Family & Community Medicine Department, past president of the Society of Teachers of Family Medicine and current president of the American Board of Family Medicine.

continued on 16
MCG’s program is not designed to be a recruiting tool for primary care, but sometimes that’s a byproduct.

Dr. Randy Colvin, a 1995 School of Medicine graduate, decided to become a family physician after his clerkship under Dr. Reimer’s supervision. He is now a clinical assistant professor in the program and runs the clerkship at the Center for Primary Care’s Crossroads office in suburban Augusta.

“It really solidified my interest in family medicine,” Dr. Colvin. “Now, I look at teaching as giving back to MCG and helping encourage students to go into family medicine.”

Programming efforts for the community-based clerkship were initially developed under the leadership of Dr. Ohlen Wilson, who came to MCG in the late 1970s to oversee an educational partnership with a network of rural clinics and an elective summer clinical preceptorship program. Dr. Wilson, who spent 22 years practicing primary care medicine in rural South Georgia, was motivated by conversations with residents in rural Warrenton, Ga., about the shortage of family physicians in their area.

This educational/service program boosted medical resources in the rural area, gave students their first exposure to community-based medicine and was the launch pad for MCG’s third-year family medicine clerkship.

“In my opinion, I thought it would be one of the bright spots in their training,” said Dr. Wilson, who has since retired to his native Virginia. “They would get more first-time exposure to patients. I didn’t see how it could not be successful.”

He and Dr. Joseph W. Tollsion, who retired as chair of the Department of Family Medicine in 1998, along with other Family Medicine faculty members and staff crisscrossed Georgia to recruit community-based family physicians to participate in the new clerkship. Dr. Tollsion, who recently retired as senior vice president of the American Board of Family Medicine, said participation was, and remains, a major commitment on the part of the community-based physicians.

“These folks are busy family physicians,” he said. “They give of themselves because they have a passion for the field of medicine and for MCG students.”

Dr. Hobbs said the clerkship not only prepares students to work in community settings, but gives them early exposure to the larger role they will play in these communities.

“In smaller communities, students are able to see firsthand how an individual physician can be involved directly or indirectly in a significant part of the overall health care of a population,” he said. “He or she is engaged in the community in a fashion that makes them recognizable outside their office or hospital as a physician, whether it’s at church or at a football game on a Saturday night.”
Close to home: Alum builds practice on house calls

Dr. Brian Stephens was looking for a way out of what he calls “McMedicine.” “Seeing a patient every seven minutes at a clinic is not good health care,” said Dr. Stephens, a 2002 Medical College of Georgia graduate.

So in 2007, he and his wife Tea, also a family physician, created Little Black Bag Medical. The Jacksonville, Fla.-based primary care practice makes house calls exclusively, which allows Dr. Stephens to spend as much time as he needs with his patients in the comfort of their homes.

“Sometimes I get a call, and I said, ‘I’ll be there in an hour,’” he said. “He said, ‘You’re already there!’”

The old-fashioned method of providing care is once again feasible because new technologies have drastically reduced the size of diagnostic equipment such as X-rays and ultrasounds.

“I can do blood work, EKGs, X-rays – just about anything – in the home now,” Dr. Stephens said. “Everything is being miniaturized.”

The Atlanta native said the practice is financially viable because Medicare reimbursements are slightly higher for home-based care and because he doesn’t bear the cost of an office lease or staff salaries. He maintains privileges at several Jacksonville-area hospitals in case one of his 150 patients requires inpatient treatment.

Working from home allows Dr. Stephens to spend more time with his three children, but the tradeoff is that he is on call 24 hours a day.

“I never know when I might get a call,” he said. “Sometimes my day doesn’t start until 10 a.m., other days it might start at 2 a.m.”

His decision to “stick his neck out” and start his own practice was partly inspired by Dr. Meyer Schwartz, a primary care physician and assistant professor with whom he trained in the MCG School of Medicine’s Department of Family Medicine.

“I realized having a huge practice wasn’t necessary to make a decent living,” Dr. Stephens said. “Doctors who complain and say they can’t make money at family medicine aren’t very inventive.”

Unique family medicine residency program expecting growth

One of the things that make the School of Medicine’s Department of Family Medicine so unique is its least known program – a three-year residency rotation for osteopathic physicians.

The department’s four-year-old osteopathic medicine program is the only one of its kind in Georgia, and among the few in the nation, where doctors of osteopathic medicine (D.O.) complete their graduate medical education at an allopathic (M.D.) school.

Osteopathic practitioners, upon graduation from an osteopathic school, generally rotate through residencies at community-based practices accredited by the American College of Osteopathic Family Practice (ACOFP). That such an accredited program exists at the Medical College of Georgia illustrates the institution’s desire to boost family medicine practitioners in Georgia.

“We have had good luck with some of our D.O.s actually going into practice in underserved communities in Georgia,” said Dr. Julie Dahl-Smith, a 2002 graduate of the program who now serves as its program director.

The Department of Family Medicine created the program as an internship in 1973. It was accredited by the American Osteopathic Association in 1996 and, later, the ACOFP when it was converted to a three-year residency program in 2004. Since then, one to two osteopathic physicians complete the program each year.

It remains the only dual D.O./M.D. family medicine program in Georgia affiliated with an academic medical center.

MCG’s program draws osteopathic medical school graduates from around the nation because of the limited number of full residency programs nationwide. But Dr. Dahl-Smith believes an increasing number will come from the Philadelphia College of Osteopathic Medicine’s recently completed Georgia campus in suburban Atlanta, which will graduate its first class in 2009.

“I do think that applications will increase,” said Dr. Dahl-Smith, one of three faculty members in the program. “There have just been so many osteopathic medical schools that have opened in the past 10 years.”

Residents who complete the MCG program are “double boarded” by the American Board of Osteopathic Family Physicians, which certifies D.O.s, and the American Board of Family Medicine, which certifies M.D.s. Such dual programs, Dr. Dahl-Smith said, are considered to be stronger programs than stand-alone D.O. residencies, which improves the residents’ employment opportunities in states where M.D.s have more influence. Also, D.O. residents who do not complete an accredited osteopathic internship are unable to practice in seven states where the accreditation is required.

All D.O. residents at MCG rotate through the osteopathic manipulation clinic at MCG Medical Center’s Ambulatory Care Center, where they practice osteopathic manipulative medicine, a type of manual therapy for the musculoskeletal system. The therapy is one of the core principals of osteopathy, as is treating the patient as a unit that includes the mind and spirit as well as the body.

Though there are no regulatory differences between M.D.s and D.O.s, Dr. Dahl-Smith said she believes osteopathic medicine’s holistic approach to health care makes D.O.s well-suited for the practice of family medicine.

“We’re all about patient-centered care,” she said.
The MCG School of Medicine’s five science-based Discovery Institutes outlined their goals and year-to-date performance during a daylong retreat in February. The institutes were created last year to improve the process of translating basic science discoveries into clinical applications. The institutes are headed by a Ph.D. and an M.D. and are organized along MCG’s existing research strengths.

**Brain & Behavior (BBDI)**

*Co-directors: Joseph Z. Tsien, Ph.D., and David Hess, M.D. (interim)*

*Research focus: Stroke, schizophrenia and Alzheimer’s*

- The BBDI plans to recruit two physician-scientists with a track record of National Institutes of Health-funded clinical-translational research during the next two years as well as two primate physiologists for its cognition and memory program.

- This year it intends to establish an internal advisory committee that includes members of each program in the institute, establish a relationship with East China University to fund at least one pilot program and submit at least one Investigational New Drug Application to the U.S. Food and Drug Administration.

- In 2011, the institute hopes to submit a Program Project Grant (P50) to the NIH and launch a funded phase I clinical trial in neurological/psychiatric disease at MCG Health, Inc.

- Institute leaders will collaborate with the University of Georgia and other state institutions to establish a coalition to research induced pluripotent stem (IPS) cells.
Cardiovascular (CVDI)
Co-directors: Stephen M. Black, Ph.D. and Gaston Kapuku, M.D.
Research focus: Atherosclerosis, hypertension and resulting cardiovascular conditions

- The CVDI has appointed the following physicians and scientists to its Scientific Advisory Board: Zheng Dong, Ph.D.; Brian Kirkpatrick, M.D.; Abdullah Kutlar, M.D.; David Pollock, Ph.D.; Vincent Robinson, M.D.; and Richard White, Ph.D.
- It expects to fund its initial round of proposals and create a Web site this spring. It plans to initiate a seminar and fellowship programs in cardiovascular disease this summer.
- Its clinical fellowship award has been established at $60,000; clinical faculty training award, $125,000; programmatic development award, $100,000; and seed awards, $25,000.

Diabetes & Obesity (DODI)
Co-directors: David Stepp, Ph.D. and Yanbin Dong, M.D.
Research focus: Biological and behavioral triggers of youth obesity and diabetes

- The DODI has named the following clinicians and scientists to its internal advisory board: Paul Bernard, M.D.; Adviee Ergul, M.D.; David Fulton, Ph.D.; Ph.D.; Mark Hamrick, Ph.D.; Carlos Isales, M.D.; Brain Kirkpatrick, M.D.; Richard McIndoe, Ph.D.; and Jack Yu, M.D.
- Second-year goals include obtaining Institutional Training Grants (T32) to develop and enhance research training opportunities for individuals training in biomedical, behavioral and clinical research. It also seeks to establish a statewide board to seek charitable contributions to research funding.

Immunotherapy (IDI)
Co-directors: Andrew L. Mellor, Ph.D. (interim) and David H. Munn, M.D.
Research focus: Chronic inflammatory diseases, counter-regulatory mechanisms, chronic infections, vaccinology, autoimmune and allergic diseases, transplantation and cancer

- The IDI will focus on developing new immunotherapies to manipulate immune tolerance mechanisms to treat a range of chronic inflammatory diseases. The focus on a unifying scientific theme will help leverage resources and maximize use of expensive research infrastructure.
- The IDI is structured to follow the NIH multi-project cooperative agreement model (U01/U19) to integrate basic and clinical research faculty with overlapping research interests and incorporate critical MCG Research Core Facilities.

Vision (VDI)
Co-directors: Sylvia B. Smith, Ph.D., and Julian J. Nussbaum, M.D. (interim)
Research focus: Diabetic retinopathy, glaucoma, macular degeneration and retinopathy of prematurity

- The VDI’s goal is to be one of the top 10 vision science institutes in the United States.
- It announced it has created an internal advisory board consisting of the following faculty: Sally A. Atherton, Ph.D.; Kathy Bradley, Ph.D.; Ruth B. Caldwell, Ph.D.; Pankaj Gupta, M.D.; David Hess, M.D.; and Jeffrey Mumm, Ph.D. An external advisory board is under development.
- Approximately $5 million in external grant funds are under review, complementing $11.6 million in existing funding that runs through 2013. The institute also intends to seek an Institutional Training Grant (T-32).
- Collaboration has been increased through a monthly lab meeting and distinguished seminar series and will be further enhanced by the development of a Web site.
Grin & Bear it

Fifteen-year study becomes a part of life for TEDDY families

Ashton Bryant’s big blue eyes are about half mast and his little head is starting to droop.

It’s Saturday and naptime so what else should the 3-year-old be doing, except maybe playing with the fluorescent green motorcycle about to fall out of his small fist.

Instead, he’s drifting off in mom Andrea Bryant’s lap while she talks about the family’s participation in an international study to understand the causes of type 1 diabetes. It seems odd that her trim child, who is active and eats a healthy diet – except for the occasional fudge-covered Oreo or two – would be part of such an initiative.
But unlike type 2 diabetes, in which obesity and inactivity are believed to be major contributors, Ashton is at risk because some genes in his body and environmental triggers could cause his immune system to turn on the insulin-producing cells of the pancreas. When this happens in children, virtually all become insulin dependent unless they get a pancreas or islet cell transplant. The complications of type 1 diabetes – kidney and cardiovascular disease, nerve damage and blindness – would be severe for an adult, let alone a child.

The irony is that rather than a virus or a gunshot causing the damage, the body, in effect, hurts itself. And that is part of the mystery researchers at the Medical College of Georgia and across the world are trying to solve: how the wrong combination of genes and environmental factors afflict 1 out of 200 U.S. children, a rate growing by 3 to 5 percent each year.

Ashton is enrolled in The Environmental Determinants of Diabetes in the Young, or TEDDY, a study involving the screening of 360,000 newborns with the goal of enrolling 7,800 who have one or more of what are believed to be the highest-risk genes for type 1 diabetes: HLA-DR and HLA-DQ. These genes are key regulators of the immune system and essential to fighting infection. but some of their variations also can contribute to autoimmune disease. TEDDY follows children with these variations for 15 years, through the peak ages of disease development.

continued on 22
TEDDY staff are well aware of the commitment required by families. “It’s hard on the families. We ask a lot,” said Diane Hopkins, project manager.

The staff tries to make things as easy as possible, including seeing Ashton for his quarterly checkups on Saturdays. Andrea has to work weekdays and weekends sometimes in her job as an administrative assistant for a large real estate company. Without the availability of Saturday appointments, the young mom admits she couldn’t fit TEDDY into the schedule. “It’s busy sunup to sundown. But they are real good to him so he feels comfortable.”

The complexity of the problem requires TEDDY researchers to scrutinize large numbers of children for many years.

Investigators at MCG, the lead TEDDY site in Georgia and Florida, have screened 66,000 newborns and enrolled 700 into the study since work began in 2004. Other TEDDY sites are in Colorado and Washington as well as Finland, Sweden and Germany. Another 200 newborns will be enrolled in Georgia and Florida over the next year, the final year of enrollment.

Five years of the 15-year study period will be funded by a recent $10 million grant renewal from the National Institutes of Health. The grant will enable the expansion and continuation of the study in Georgia and Florida, says Dr. Jin-Xiong She, director of the MCG Center for Biotechnology and Genomic Medicine and TEDDY principal investigator.

The Georgia Research Alliance Eminent Scholar in Genomic Medicine was among the diabetes researchers who years ago helped devise the strategy for dissecting the complex disease. “You really have to look at the progression of the disease longitudinally,” Dr. She said.

Although TEDDY screens for just two genes, about a dozen are now known to increase risk. Drs. She and Cong-Yi Wang discovered one of those genes, SUMO-4, in 2004 and will soon publish findings about another. Dr. She believes there are at least 20 genes associated with the disease.

Dr. She’s studies are yielding protein markers that indicate there are actually subtypes of type 1 diabetes, which supports the idea that a large number of genes and environmental factors come into play.

“You are probably not going to stop the disease in all children with one approach,” he said.

He hopes TEDDY will help researchers identify child-specific causes so an individualized treatment, or even prevention, strategy can be identified. “Once we know the mechanism of the disease, we can treat the subtypes differently according to the causes of the disease,” said Dr. She, who already is contemplating clinical trials that incorporate these latest findings. “It’s very, very exciting.”

Mrs. Hopkins said the team wants to identify the environmental factors because they can’t do anything yet about the genetics. “We think high-risk children are exposed to a set of triggers; it may be dietary, it may be viral, it may be a stressor, it may
“We think high-risk children are exposed to a set of triggers; it may be dietary, it may be viral, it may be a stressor, it may be all three. It could be viral but only if the exposure occurs early in life. It may be different things in different people. It’s anybody’s guess at this point.” –DIANE HOPKINS, PROJECT MANAGER

be all three. It could be viral but only if the exposure occurs early in life. It may be different things in different people. It’s anybody’s guess at this point.”

For example, a prevailing theory is that early exposure to cow’s milk is a cause, and that breastfeeding is protective, so TEDDY staff members gathering data about what kind of milk or formula the child gets. “There is a ton of information we are collecting,” Mrs. Hopkins said.

A goal of TEDDY is to discern fact from theory then work backward to fight the disease. Researchers hope one day screening will be routine and that when high-risk genes are identified, parents can receive instructions on what to do to keep their child from developing the disease.

Parents such as Andrea Bryant look forward to the day that becomes routine for all families. Diabetes wasn’t a concern the day she delivered Ashton at Augusta’s University Hospital. Rather she was managing the usual worries of childbirth, such as waiting to hear that first cry. But the day she was to take Ashton home, she was approached about participating in the TEDDY study. Considering her husband’s family’s struggles with type 2 diabetes, she saw TEDDY as an opportunity she could not pass up for her firstborn. It turned out to be a good decision as Ashton had one of the high-risk genes. “It hits them out of left field,” Mrs. Hopkins said. “The genes have been traveling all through mom’s side of the family and dad’s side of the family and maybe that magical combination has not happened until this particular baby.”

Each gene has two halves and each parent contributes half so there are four possible combinations for any one gene in a child. A child with one or both of the two bad genes they are screening for along with a first-degree relative with the disease has about a 14 percent or higher risk of getting type 1.

Diane Hopkins (from left), clinical research manager and Kim English, clinical research assistant, entertain 18-month old Kim’Breannia Mack, a study enrollee.
About 90 percent of TEDDY participants who have developed type 1 diabetes don’t have an immediate family history. However, those with a family history have been the study’s highest enrollers, likely because they know firsthand what it’s like living with the disease, Mrs. Hopkins said. The TEDDY team provides support and constant monitoring to make the earliest possible disease diagnosis. To do this they draw blood on Ashton—not his favorite part—during his quarterly visits.

“There are three different proteins we can scan for in the blood that are basically byproducts of the process of the immune system attacking the pancreas,” Mrs. Hopkins said. Though a diagnosis has not been made for Ashton, Andrea holds her breath every time the results arrive.

Right now, there is nothing that can stop the disease, but early diagnosis means children can start taking insulin early and at least delay the disease’s complications, Dr. She said. It’s a stark contrast to how the autoimmune disease is typically diagnosed: gravely ill children are brought to an emergency room where parents find out the pancreas is essentially wrecked.

To date, no Georgia participant and only one from Florida have developed type 1 diabetes, although several now have autoantibodies that show a diagnosis is likely in their near future. Researchers say the differences they find between the children who get it and those who don’t are invaluable.

Andrea said she is just grateful the researchers are looking, and she hopes the study data will one day help stop the disease that causes her such angst every time she gets the lab results for her precious toddler. “I hope it’s an eye opener, it gives them more information about the disease and what we can do to fix it.”

TEDDY SITES

GEORGIA
MCHealth Medical Center, Augusta
University Hospital, Augusta
Trinity Hospital, Augusta
Northside Hospital, Atlanta

FLORIDA
Shands Teaching Hospital, University of Florida, Gainesville
North Florida Regional Medical Center, Gainesville
Shands at Alachua General Hospital, Gainesville
Moffitt Cancer Center and Research Institute, University of South Florida, Tampa, is analyzing the extensive data collected.
For more information, call the MCG TEDDY study office at 706-721-4161 or 1-888-225-7785.

COLORADO
Barbara Davis Center at the University of Colorado, Aurora

WASHINGTON
Pacific Northwest Research Institute, Seattle

FINLAND
University of Turku

SWEDEN
Lund University

GERMANY
Diabetes Research Institute, Munich
Looking Back

‘81 alum was one of nation’s first casualties of terrorism

A FUTURE UNREALIZED

BY DAMON CLINE

Dr. John Hudson with infant son Will in August 1983 while on leave in Greece. This was the last time his family would see him alive.
Dr. Hudson was the eldest of Samuel and Losie Hudson’s three children. The family moved often during his father’s 23-year career in the U.S. Army, where he was a decorated veteran of the Korea and Vietnam wars.

The family eventually settled in Fayette County near Atlanta, where Dr. Hudson met David Anders, a fellow trombone player in the elementary school band. The two remained best friends through high school and were inseparable as roommates at the University of Georgia and MCG, which Dr. Hudson paid for through a Navy scholarship program that required him to enlist after medical school.

But his future was cut short on Oct. 23, 1983, when he and 240 other military personnel stationed in Beirut, Lebanon, were killed when a suicide bomber drove an explosive-laden truck into the U.S. Marines’ barracks.

The attack — the deadliest single assault on U.S. servicemen since World War II— was largely forgotten by the public until 9-11 brought it back into the American conscience.

In the minds of Dr. Hudson’s family, however, it never faded from memory.

“For 99 percent of Americans, terrorism started on Sept. 11, 2001,” said Dr. Hudson’s son, Will, who was 8 months old when his father died. “For my mom and me, terrorism started on Oct. 23, 1983.”

Dr. Anders, who now practices internal medicine in Fayette County, said Dr. Hudson had an extraordinary personality.

“He enjoyed life to the fullest and wanted everyone to come along for the ride,” he said. “When you get together with people and talk about John, even 25 years later, you can’t get two or three minutes before somebody has a big belly laugh over something he did.”

His antics, including wearing a gorilla suit to the student center and strolling into his anatomy finals playing his trombone, tested the patience of administrators but provided comic relief to his stressed-out classmates.

“His friends have told me he was the guy who made everyone loosen up and enjoy themselves,” Will said.

“For 99 percent of Americans, terrorism started on Sept. 11, 2001. For my mom and me, terrorism started on Oct. 23, 1983.”

— WILL HUDSON
Those who knew him cited an almost childlike innocence.

“John had a real dry sense of humor, but he was a very caring person,” said Dr. Bob Parrish, former MCG chief of pediatric surgery and founding member of Code 99, a band Dr. Hudson played with for two years.

Dr. Hudson was a sophomore in 1979 when he met his future wife, Lisa, at an Augusta night spot. He had gone to pick up an amplifier he loaned to a friend but ended up staying once he saw the 23-year-old registered nurse from Milledgeville, Ga. He called her the next day and the two hit it off immediately.

“He was so unpretentious,” Lisa recalled. “He was probably the smartest man I’ve ever known, but he was so unpretentious about it.”

The two discussed marriage, but Dr. Hudson initially wanted to put off a wedding date until after completing his military commitment.

“He made up his mind he was going to complete medical school and pay back his time to the Navy before he settled down,” Lisa said. “But I interrupted that process.”

The two were married on Sept. 13, 1980, with Dr. Anders as best man.

“I lost a good roommate,” Dr. Anders said. “But she got a good one.”

Semper Fidelis

Dr. Hudson enlisted in the Navy, which provides health care services to the U.S. Marine Corps, after completing the first year of his residency at MCG. The newlyweds moved to Camp Lejeune in Jacksonville, N.C., where Will was born on Feb. 15, 1983.

Having grown up an Army brat, Dr. Hudson was comfortable with military service. However, he was far from the average recruit.

Will recalled one particular story relayed to him by his father’s commanding officer, Lt. Col. Larry Gerlach, whose injuries during the barracks bombing made him a paraplegic.

“My dad would drive the officers crazy because he wouldn’t put his boots on,” Will said. “He told them, ‘These boots are putting blisters on my feet. If I was seeing a patient who had blisters like these, I would tell him to stop wearing these boots.’ My dad was a doctor first and foremost.”

Dr. Hudson’s service was uneventful until then-President Ronald Reagan ordered the 2nd Battalion, 8th Marine Regiment to participate in a multinational peacekeeping mission in Lebanon, which was in the midst of a civil war.

He left for Beirut on April 9, 1983. The Marines set up their headquarters at the Beirut International Airport and were initially successful at preventing attacks from militant factions operating in the country.

However, as the year wore on, it became clear to Dr. Hudson that militants were becoming increasingly confrontational.

“Rockets and artillery are coming into our area but we don’t shoot back because we’re not supposed to be in a war, but we are in a war,” he said in a taped message to his wife on Sept. 5. “We’re in a combat war zone.”

‘Things are so different here’

Andy Gaddo was a 30-year-old staff sergeant and combat correspondent when he served in Beirut, which many of the 1,200 Marines referred to as “The Root.”

He said Dr. Hudson was well-known around the compound.

“Everybody knew who the battalion surgeon was,” said Mr. Gaddo, who now lives in Peachtree City, Ga. “All the medical people were considered very special people, but he was the only qualified doc on shore. The other guys were called docs, but they were really medical techs.”
Most of Dr. Hudson’s skills went unused early in the deployment. On one recording he said he was unable to practice “99 percent of the knowledge” he learned in medical school. Even depression was rare among the troops.

“They like being Marines and they like the job they have to do,” he said. “They motivate themselves. I’m really impressed with them.”

However, Dr. Hudson became concerned about his fellow troops – and his own wellbeing – as the skirmishes intensified. Marines no longer came to his basement clinic with sore throats and earaches; they now had bullet and shrapnel wounds. In an Aug. 31, 1983 postcard to Dr. Anders, he said he was worried about “coming home in a box or altered state,” and that “things are so different here, more than anything you could ever imagine.”

And he continued to express his dismay at the rules of engagement. Weapons were constantly pointed at the Marines, but they were prohibited from actively engaging the enemy unless fired upon. Dr. Hudson wrote about the futility to Sen. Sam Nunn, then chairman of the U.S. Senate Committee on Armed Services.

In one of Dr. Hudson’s last communications—a tape sent to a freelance reporter in Atlanta—he referred to the troops as “sitting pigeons.”

“We actually can watch them build a bunker by day, see them put ammunition into the bunker, and you know what’s going on,” he said on the tape. “They can kill, maim, seriously injure Marines and sailors, and then – once they’ve shot – you have the option of shooting back.”

Dr. Hudson reunited with his wife and 6-month-old son in Greece while on leave from the base from Aug. 20-28. It was the last time they would see him.

**Shattering the Silence**

The Root was peaceful during the early dawn on Oct. 23, 1983. The cacophony of distant artillery fire had fallen silent.

At around 6 a.m. Staff Sgt. Gaddo had stepped outside his bunker to enjoy the morning sun before walking to the barracks, where he planned to develop eight rolls of film in a makeshift photo lab on the second floor.

“I started walking over there – it was less than a minute’s walk, maybe a couple hundred yards – then I just stopped,” he said. “It was just such a beautiful morning, very quiet. I just thought it was too good of a morning to go inside, so I turned around and went back to get a cup of coffee.”

“Rockets and artillery are coming into our area but we don’t shoot back because we’re not supposed to be in a war, but we are in a war. We’re in a combat war zone.”

– John Hudson

continued on 30

John Hudson’s name appears on the Beirut Memorial at Camp Lejune in Jacksonville, N.C.

The Hudson Clinic today
The decision saved his life.

At approximately 6:20 a.m., a truck packed with explosives accelerated through the compound’s gate, barreling past two sentry posts and another gate before crashing into the lobby of the barracks. The Marines, under strict rules of engagement, barely had time to load and shoulder their weapons before the suicide bomber detonated explosives equivalent to six tons of TNT.

“J heard a couple of shots go off, then I felt the heat of the blast,” Mr. Gaddo said. “The shock wave threw me back like a rag doll. I thought we had been hit by an artillery shell.”

Those not killed by the blast were crushed when the four-story, reinforced-concrete building collapsed into a heap of rubble.

Seven time zones to the west, the sun had set on suburban Atlanta. Earlier that day, Dr. Anders proposed to his girlfriend, Kenya, in Stone Mountain, Ga. He had alluded to the pending engagement in letters to Dr. Hudson, and had asked his childhood friend to be best man at the wedding.

He went to sleep that night unaware his friend was already dead.

“I was getting into bed shortly after midnight and my sister mentioned something about a bombing in Beirut,” Dr. Anders recalled. “I was just hoping that it wasn’t going to be too much work for John – that he didn’t have to do too much triage. Later we learned it was much worse, that the whole compound had been attacked.”

Recovering the bodies took several days. Dr. Hudson was found on day two, inside his sleeping bag.

Ms. Hudson feared her husband was dead the moment she saw news footage of the destruction. Those fears were confirmed by a visit from two Naval officers.

“They came up to the door, just like they do in the movies,” she recalled. Her husband’s body was returned to the United States two weeks later and buried at her family’s dairy farm south of Milledgeville, an area where he hoped to one day build a home and practice medicine.

The U.S. government ruled in 2003 that the attack was carried out by the militant Islamic group Hezbollah with backing from the Iranian government.

Military analysts say the attack was America’s first brush with “fourth-generation warfare,” in which ideologically motivated insurgents use guerrilla techniques and civilian populations to create tactical dilemmas for an enemy. The insurgents’ strategy is to achieve victory not through superior military strength, but by convincing the enemy’s political leaders that victory is either unachievable or not worth the human toll.

President Reagan withdrew the troops less than five months after the attack.

“We pulled out, so in a way, it showed them their tactics worked,” said Mr. Gaddo, currently the national president of the Beirut Veterans Association. “It was really a modern-day watershed event. We’ve seen identical elements in the wars after 9-11.”

Will met Mr. Nunn for the first time at a charity event in Atlanta last year. To his surprise, the former senator remembered the letter his father wrote 25 years ago.

“He said, ‘That letter will haunt me for the rest of my life,’” Will recalled. “He said, ‘Your dad was exactly right. He knew exactly what was going on.’”

“That letter will haunt me for the rest of my life. Your dad was exactly right. He knew exactly what was going on.”

–WILL HUDSON, recalling his encounter with former SEN. SAM NUNN

continued on 32
A scholarship fund was started in Dr. Hudson's name shortly after his death, and in 1987, the clinic at the U.S. Naval Supply School in Athens was renamed in his honor.

The building's plaque rekindled memories in Dr. Sam Richwine, a 1977 MCG graduate who completed his surgical internship and residency at MCG.

“It finally rang a bell that John Hudson had been an intern of mine when I was a general surgery chief there,” said Dr. Richwine, a plastic surgeon in Gainesville, Ga.

The Athens native hopes the memorial remains after the 58-acre Naval School property is transferred to the University System of Georgia in 2011, for use as an MCG-UGA medical campus.

“I think it would be great if we were somehow able to keep the Hudson name somewhere on campus,” he said, “not only to honor John as an MCG grad, but also the gift of his life to the country.”

Ms. Hudson never remarried.

“I've never had another best friend like him,” she said. “I miss my friend more than I miss my husband.”

She and Will moved from Milledgeville to Augusta, where she worked as a nurse until completing MCG’s psychiatric nursing program in 1995. The training allowed her to open a counseling practice for women with anxiety and post-traumatic stress disorder. Setting her own schedule gave her the flexibility to attend Will’s sporting events and other school functions.

“He's the reason I'm alive, that's the truth,” she said. “Every day that I got up after that was because I had him to take care of him. He was my motivation to move on.”

Will, who married in June, recently started a professional recruitment firm, Complete Recruiting Solutions LLC in Atlanta. He also has political aspirations, which stem directly from the loss of his father.

“I think some of our leaders make decisions without really thinking about the impact they may have,” he said. “When you know what it feels like when those decisions go bad, it makes you think a little more carefully and thoughtfully.”

Several of Dr. Hudson's friends stay in touch with his widow and son, including classmate Dr. Allan Panter, a Gainesville, Ga., resident who practices emergency medicine.

He said Dr. Hudson would be proud of his son.

“I can’t say enough about Lisa’s parenting,” said Dr. Panter, who dropped in to visit Will at Furman University whenever he was passing through. “Will is well-rounded; he seems to be a complete package.”

For Dr. Panter, spending time with Will is almost like spending time with the young man’s father. Almost.

“I don’t think you’re ever going to meet anybody like John Hudson,” he said. “If you ever meet someone like him in your lifetime, you’re fortunate.”

“I think it would be great if we were somehow able to keep the Hudson name somewhere on campus not only to honor John as an MCG grad, but also the gift of his life to the country.”

–DR. SAM RICHWINE
“I don’t think you’re ever going to meet anybody like John Hudson. If you ever meet someone like him in your lifetime, you’re fortunate.”

—DR. ALLAN PANTER
One of MCG’s youngest-ever students holds his own

While other 17-year-olds were taking the SAT and flipping through college view books, Ajay Pillai was purchasing a stethoscope and the Atlas of Human Anatomy to prepare for his first year in medical school.

“A few days before I started, I couldn’t sleep because I was so excited about coming here,” said Ajay, who enrolled in the Medical College of Georgia School of Medicine in the fall. “It was finally what I wanted to do. I had been waiting all summer for it.”

Ajay, who turned 18 in November, skipped high school altogether and began his freshman year at the University of West Georgia at age 13. He breezed through the SAT when he was 12, scoring a 1,540 his second time.
“I took it early because Duke University has a three-week program for kids, and my mom didn’t want me to waste my summer away,” he says nonchalantly.

The Duke University Talent Identification Program provides gifted children with programs and activities beyond what is offered in the classroom. But before Ajay began the program, his SAT scores were sent to the Advanced Academy of Georgia.

He and his parents felt the academy would be better suited for him, and the location was a plus. It’s located at the University of West Georgia in Carrollton, Ga., just two hours from their home in Warner Robins.

Ajay was the youngest student to enroll at West Georgia. The academy is one of 17 residential programs for teens in the country that allow students to earn high school and college credit simultaneously.

“The students in the program are usually 16 when they start, and back then, you could tell I was younger. At first, I was nervous. But I was really excited about the classes,” Ajay says. A few seconds tick by before he confidently adds, “That’s something I’ve never had problems being excited about.”

Ajay’s excitement to learn extended beyond the classroom, ultimately leading him to medicine. He spent summers volunteering at his parents’ private practice – both are internal medicine doctors – and it was then he met his mentor, Dr. Johnny Gayton, an ophthalmologist in Warner Robins.

“Dr. Gayton really took me under his wing,” Ajay says. “He let me shadow him at his practice for a while. He also had surgery days every week, which definitely helped pique my interest. He made a big impact on me.”

Dr. Gayton also invited Ajay to the World Ophthalmology Congress conference in Hong Kong this summer where he attended various presentations and technology exhibits. He was particularly fascinated by a new type of intraocular lens implanted in the eyes to treat cataracts. “I’m really interested in going into a field that (incorporates technology), but I’m still thinking about it,” he says.

Though he’s undecided on his specialty, there was never a doubt about where he wanted to apply for medical school – MCG was his first and only choice, he said, citing his desire to stay close to home.

“But I do think I’ll move to a big city for my residency,” Ajay says.

But what about . . .?

Ajay didn’t go to prom. He didn’t participate in Senior Skip Day with his friends. He’d already taken the SAT before he and his friends made it to eighth grade. Does he feel he missed out? “There wasn’t anything I was looking forward to in high school, really. A lot of people tried to hype it up for me and tried to convince me not to go to college. I missed my friends for a while, but we talked whenever we wanted.”

Cell Phone Reception

Because he was only 13 his freshman year of college, his parents called him every single day.

Age is Just a Number

Ajay says he endured many jokes about his age when he began medical school. “But they probably shouldn’t be repeated,” he says, laughing. “There were no hard feelings, though. It was all in fun.”

Get in the Game

When he has time, Ajay heads to Riverview Park in North Augusta with classmates to play ultimate Frisbee. He played every day at West Georgia, but not as often here.

Imparting a Message

Ajay’s favorite book is The Fountainhead by Ayn Rand. “She has a strong view of morality, hard work and ethics, and I enjoy that,” he says of the author. He says the same about his favorite movies, Om Shanti Om, Kingdom of Heaven and The Last Samurai. “I feel like they really impart a message as far as how you should be in your life,” he says.

Strong Roots

Ajay is Indian. He was born in Houston, but visits India regularly with his family. “I love India. It’s a place where I feel I can find myself really well.”

Before the Stethoscope

For most of his childhood, Ajay wanted to be an astronaut. Even after beginning college at West Georgia, he was thinking about going into the space program. It wasn’t until he began volunteering at his parents’ practice and in other hospitals that he decided he wanted to be a doctor.

Shout-Out

Dr. Carol Nichols, assistant professor of cellular biology, is one of Ajay’s favorite professors. “I definitely look up to her,” he says. “She’s just really helpful, even outside class.” Dr. Vadivel Ganapathy, chair of the Department of Biochemistry and Molecular Biology, is another favorite. “He’s really great; he knows exactly what he’s doing, and he lectures completely from memory and goes 100 mph, so you really have to pay attention.”
Two decades after leaving China, Lin Mei is at the forefront of schizophrenia research

Dr. Lin Mei has hard-won expertise in dealing with illogical, unwanted commands.

He was on the receiving end of those commands as a child growing up during the Cultural Revolution in China. Today, as a schizophrenia researcher at the Medical College of Georgia, he is trying to silence the unwanted voices that are a hallmark of the disease.

Dr. Mei was 7 when Chairman Mao Zedong unleashed a 10-year experiment in creating an egalitarian society by uplifting the poor and stripping the affluent of their wealth. Dr. Mei, his siblings and their parents, one a cardiologist and the other a public health scientist, were relocated from Nanchang to a nearby rural province where they were told to farm the land as part of their “re-education.”

It wasn’t bad from a child’s perspective. The small farmhouse they were assigned to wasn’t home, but it did have a beautiful view of the mountains and was next to a small river that offered the boy and his younger brother respite from the summer heat.

But for his parents and many others, the injustice and indignity sting to this day.

“Many people were afraid of standing up to the government and telling them it was wrong,” said Dr. Mei, director of the MCG Institute of Molecular Medicine and Genetics and Georgia Research Alliance Eminent Scholar in Neuroscience. Intellectuals were labeled spies, spit upon and even given strange haircuts. Some took their own lives.

When they returned to the city a few years later, its infrastructure was in shambles; hospitals and schools were closed and unemployment rampant.

But life began to stir.
Charting His Own Course

His parents resumed their jobs and the family resumed its life. Another directed exodus would come a few years later, but this time Dr. Mei was allowed to stay with his parents in the city. He was told to learn to drive a truck and work in a printing house. Again, it was not so bad but the studious young man had in his mind to be a physician.

When Deng Xiaoping reinstated the college exam that was halted at the beginning of the revolution, Dr. Mei took the first step by gaining entry into the medical school where his parents taught.

However, while working on his medical degree, his dreams started to change. He became more interested in basic science, which he saw as a way to indulge his natural curiosity of how things work.

“You feel like you learn something new every day,” he said. “Doctors also learn but they have to follow procedures in taking care of patients.”

Dr. Mei had had enough of following orders. He was ready to chart his own course.

He moved to Beijing to pursue a master’s degree in neuropharmacology. He became interested in muscarinic receptors, little-understood membranes that bind with the neurotransmitter acetylcholine to slow heart rate and increase glandular secretion and smooth muscle contraction.

He wanted to study with the best: renowned muscarinic expert Dr. Henry I. Yamamura, at the University of Arizona. He wrote a several-page letter telling Dr. Yamamura where he thought the science should head.

Naïve? Brave? Either way, Dr. Yamamura wrote back saying Dr. Mei was welcome to join his team. Dr. Mei still beams at the recollection and hopes that one day he will get just such a letter from a would-be graduate student.

At Dr. Yamamura’s funeral last year, Dr. Mei eulogized the man who opened his lab to the eager, confident young scientist.

Even though there had been some tough times in his homeland, leaving it and his
family were tough was well. But for his future, he felt he must. “You leave for a better place where you can do better science,” he said of his experience in Dr. Yamamura’s lab. “America was probably the best country in science then and probably still is.”

Silencing the Voices

Dr. Mei earned his Ph.D. in pharmacology and toxicology, then completed postdoctoral work with renowned neuroscientist, Dr. Richard Huganir at Johns Hopkins University. By the time he joined the MCG faculty in 2004, his interests had come full circle. His fascination with the most intricate workings of the brain had led to its logical conclusion: repairing what goes wrong in the case of schizophrenia, one of the most insidious neurological diseases.

Schizophrenia, which affects some 2.4 million Americans, is characterized by hallucinations, disorganized thinking and the risk of aggressive, reclusive or suicidal behavior based on messages of imaginary voices that can’t seem to be silenced.

Schizophrenia has been labeled a degenerative disease, in which neurons die, and a developmental disease, where the wiring is laid wrong. But Dr. Mei’s pioneering studies are illustrating that an imbalance in brain cell communication may also be to blame.

“It’s a complex and likely mischaracterized disease,” he said.

He believes that just a subtle imbalance in brain cell excitation and inhibition could help explain the cognitive problems and possibly other disease hallmarks of hallucinations and social disconnection.

He’s found a natural check and balance that is likely affected in the brain’s prefrontal cortex, where complex reasoning and decisions about appropriate social behavior occur. Integral to the balance are neuregulin-1 and its receptor ErbB4, genes that are important for human development. Dr. Mei discovered ErbB4 at excitatory synapses in the brain, communication points between neurons where the neurotransmitter glutamate excites cells to action.

A few years after his discovery, Icelandic researchers made the initial connection between the genes and schizophrenia, reporting an altered signaling pathway for neuregulin-1 and ErbB4 genes in schizophrenics.

Side By Side

But the exact role of malfunctioning neuregulin-1 signaling was unclear until Dr. Mei and his colleagues’ recent discovery that the genes also play a role in the inhibitory synapses of the brain by releasing the major inhibitory neurotransmitter GABA.

“Right beside the place where the excitatory synapse can be activated, there is also something that can suppress it,” he said. Researchers say the discovery is a major step forward.

“(Dr. Mei’s) findings help explain how a gene that is potentially causative in disorders like schizophrenia and bipolar disorder relate to a neurotransmitter that is critical for explaining the cognitive deficits associated with the illness,” commented Dr. Daniel R. Weinberger, chief of the Clinical Brain Disorders Branch of the Intramural Research Program at the National Institute of Mental Health in Bethesda, Md., whose studies include the pursuit of additional candidate genes.

It also provides new treatment targets.

“Let’s say neuregulin is the problem in schizophrenia,” said Dr. Mei, whose work was published in Neuron in 2007. “If we don’t understand how it regulates neurotransmission, there is not much we can do to effectively treat patients. What we have found is neuregulin-1 can regulate GABA release from these neurons and if the GABA is released here, that may play a role in controlling the output of this neuron.”

Searching for Answers

At his campus office, Dr. Mei points to an illustration of pyramid-shaped neurons. They resemble high-tech switchboards pulsing with information coming in from all directions.

Pyramidal neurons process information from nearby interneurons and decide what message to move forward. They balance cognition and excitation, enabling people to balance their checking accounts and suppress the urge to run naked down the street.

“There is a ton of evidence that when inhibitory synapses, such as GABA, go wrong, the symptoms of mice and rats look similar to those of schizophrenia in people,” he said.

Mounting evidence suggests that problems with the excitatory and inhibitory synapses regulated by neuregulin-1 result in other problems as well, including seizures, depression, attention deficit/hyperactivity disorder and autism.

Dr. Mei is studying disease processes in mice to learn more about how neuregulin-1 mediates GABA release. To more closely mimic what happens in patients, he’s also developing a mouse that expresses type-1 neuregulin, which is expressed in higher levels in the pre-frontal cortex of schizophrenics, the portion of the brain critical to cognition, learning and working memory.

Dr. Mei uses inhibitors and activators to study what happens when neuregulin-1 activity goes up or down. One of his many goals is to identify small molecules, which are soluble, deliverable and would similarly manipulate neuregulin function.

“You would hope they would be like aspirin: easily deliverable to the brain,” he said.

Dr. Mei is further exploring neuregulin-1’s regulation of neurotransmission. He wants to know which transcription factors regulate expression of neuregulin-1 and how they do it, suspecting that mutated genes change how much transcription factor binding occurs and, consequently, how much neuregulin is expressed. Another key question is exactly how neuregulin-1, in turn, controls GABA release, and, ultimately if the resulting signal the neuron sends is determined by neuregulin-1. His work indicates that the protein probably has a powerful role in determining neuron communication.

“We have as our final destination trying to understand schizophrenia, and we have incremental goals,” said Dr. Mei. “We can’t...
say we will have a cure for schizophrenia tomorrow but we certainly have in our minds to try to understand what neuregulin does in the brain, to try to create ways to manipulate the neuregulin pathway, either to increase or decrease it, and see what kind of effect that has on mice and ultimately human behavior.”

Boundless Opportunity

Dr. Mei never loses sight of the fact that only open minds and open societies can unlock the mysteries of the brain. He is gratified that his own sons’ childhoods are filled with boundless potential and opportunity, noting that son James, a high school senior, recently won a prestigious competition for his studies of programmed cell death.

In a society where everyone’s voice is heard, he feels anything is possible.

Lin Mei at a Glance

Family: Wife Dr. Wen-Cheng Xiong, a developmental neurobiologist at MCG, and sons James and Gerry

Dr. Mei’s sons share their parents’ interest in science. James, a high school senior and budding scientist, recently won the individual category in the Region Six Finals of the 2008 Siemens Competition in Math, Science & Technology for his studies of programmed cell death. Gerry, a member of the science and math team at his middle school, is a year-round swimmer and avid saxophone player.

Education:
- Medicine diploma, Jiangxi Medical College
- Master’s degree in neuropharmacology, Institute of Pharmacology & Toxicology, Beijing
- Ph.D. in pharmacology and toxicology, University of Arizona, Tucson
- Postdoctoral studies in neuroscience, Johns Hopkins University

Honorary appointments:
- Guest investigator, Chinese Academy of Sciences Institute of Neurosciences
- Visiting professor, Southern Medical University, Guangzhou, China
- Program Committee co-chair, 2009 International Symposium, Society of Chinese Bioscientists in America, Taipei, Taiwan
- Treasurer, Chinese Biological Investigators Society

Other major research interest:

Dr. Mei also studies the formation of the neuromuscular junction, where nerve and muscle fibers meet, a line of research contributing to the development of novel diagnostic and therapeutic targets for muscular dystrophy.

His research team recently showed that not only do neurons tell other cells what to do, proper feedback from those target cells during development is essential. In mice, they showed that if a muscle cell fails to produce the protein beta-catenin, its neuron doesn’t develop or function properly. The study in Nature Neuroscience was some of the first proof that in vertebrates such as man, this retrograde communication — from the target cell back to the neuron — also is essential.

“Theoretically the finding is very important in that it supports the retrograde hypothesis,” Dr. Mei said. “Practically it is also important because problems with motor neuron survival and differentiation cause many neuromuscular diseases, such as muscular dystrophy and ALS, where motor neurons need to survive,” noting that it’s unknown why neurons die in these diseases.

“We believe there is a retrograde signal downstream of beta-catenin or regulated by beta-catenin. If you don’t have beta-catenin in the muscle, that signal may be missing and motor neurons are not happy.”
Dr. John Hardman, a 1968 MCG School of Medicine graduate, is president and CEO of The Carter Center, the global, nonprofit health and human rights organization founded in 1982 by former President Jimmy Carter and his wife Rosalynn.

The Atlanta-based organization’s health programs focus on fighting six diseases in developing nations in Africa and Latin America: dracunculiasis (Guinea worm), trachoma, onchocerciasis (river blindness), schistosomiasis (bilharzias or snail fever), lymphatic filariasis and malaria.

Dr. Hardman will be speaking to School of Medicine students during the hooding ceremony on May 7. Georgia Medicine Editor Damon Cline sat down recently with Dr. Hardman to talk about The Carter Center’s recent successes and his thoughts on international medical service:

Georgia Medicine: I'm sure you're looking forward to your visit here, not only as an alumnus, but also because we have many students who are active in international medical service.

Dr. John Hardman: Yes, I am. There is growing awareness of the need for disease control and disease eradication in areas of the world with minimal resources.

GM: Are there good opportunities for students in the field of international medicine?

JH: There are multiple opportunities and possibilities that might entice medical students to be engaged in international health issues. Some graduates may end up at the Centers for Disease Control and Prevention or the World Health Organization. Some may go into clinical tropical medicine or tropical public health. Others may have a strong interest in cross-cultural issues and programs in specific countries.
GM: For those who are interested in international medicine, what would you recommend as far as career planning?

JH: Foreign language skills are a bonus and cultural knowledge of other countries essential along with benefits of a public health and epidemiology background. Many medical schools are offering and encouraging students to pursue a joint MD/MPH degree. (Editor’s note: Visit www.mcg.edu/sah/dhi/mph/index.htm for information about MCG’s Master of Public Health Program.)

When students take electives or pursue residency training, they can look for a program that has a focus on international health, public health, disease prevention, or a tropical medicine component. When I was a medical student in Augusta, I did an elective in infectious disease at Mass General (Massachusetts General Hospital, Harvard Medical School’s academic hospital).

GM: So students can’t really get the exposure or training they need in international medicine unless they specifically seek it out?

JH: I think most medical schools now are including global and international medical issues in the curriculum. The diseases on which The Carter Center focuses might be covered in one or two lectures. These are diseases that currently do not exist in the U.S. but which could return in the future (such as malaria). In many developing areas of the world disease management begins with basic health knowledge and sanitation awareness.

GM: Did you always intend to work for an international health organization?

JH: When I was in college as a history major and in medical school, The Carter Center did not exist. I never thought about being at a non-profit organization focused on health and peace. Having a broad background often opens up new possibilities.

GM: I think it’s interesting you majored in history instead of science.

JH: I had a strong interest in anthropology and cross-cultural studies. As a student, I traveled to other countries and often visited archaeological sites. It was through the history of the country and its cultural issues that I became very much aware of the impact of disease on those cultures. Our Carter Center programs are characterized as “Waging peace. Fighting disease. Building hope.” All three are interrelated and interconnected.

continued on 42
GM: Can you give an example of how anthropology and disease correlate?

JH: Guinea worm, the first disease on which The Carter Center focused, is a good example.

People get Guinea worm by drinking water that contains Guinea worm larvae. The only way larvae get into the water is if a person who has the worm emerging from his skin walks into a pond and the worm discharges larvae which can then be consumed by another person when drinking or filling up a water container. The grown worm emerges after a full year from any place on the body. Historically, people in villages with infested ponds did not connect their drinking water to the worm. They often believed their gods were punishing them for bad thoughts or bad deeds or something totally unrelated if they had Guinea worm.

It can be difficult to explain to people that they should not walk into the pond with worms emerging from their bodies and that they should not drink the water without filtering it through a piece of cloth (donated by DuPont for the eradication effort) when they believe that the gods to whom they have prayed to provide water would not send them bad water. You have to understand cultural beliefs and practices in educating people about the Guinea worm so that the cycle can be ended.

GM: You must be proud being affiliated with a group that is working to eradicate such a terrible disease.

JH: Guinea worm is probably one of the oldest diseases known to man. Many people feel the reference in the Old Testament to the “fiery serpent” is really Guinea worm, because of the burning blisters through which the worm exits. When it emerges from the skin—and I’ve seen people with worms coming out of multiple parts of their bodies—it secretes a chemical that burns which drives the human hosts into the water to cool off.

Infected people cannot farm or sometimes even walk for weeks because the worm is up to 40 centimeters long and only emerges a centimeter or two a day. It must be wound on a stick to keep

For more information on volunteer, internship and career opportunities at The Carter Center, go to: www.cartercenter.org/involved/index.html
it from breaking off causing the tissue to become gangrenous or necrotic. In some cases the worm will go into the knee joint and discharge larvae into the synovial fluid, which freezes the joint and the person loses all mobility.

We’re down to the last 4,500 cases of Guinea worm in the world, and it most likely will be the second disease to be eradicated after smallpox. It is gratifying to return to villages once infected and find people so grateful to be able to work, go to school, and live free of the burning pain of Guinea worm.

GM: What about river blindness?

JH: River blindness spreads when a small black fly bites people and deposits microfilariae (tiny worms). Eventually the microfilariae will attack the eye and cause blindness. In the meantime, the microfilariae under the skin cause total body itching similar to poison ivy 24 hours a day.

Ivermectin (Mectizan), a drug donated by Merck & Co. Inc. stops the itching right away and prevents blindness. In Africa, it is given once a year to control river blindness. In six countries in Central and South America where the disease is carried by a different fly, we found that multiple doses of ivermectin result in the elimination of river blindness. Within the next two years we hope to have no more cases of river blindness in this hemisphere.

GM: Your strategy to stop the spread of trachoma (the leading cause of preventable blindness worldwide) has involved promoting facial cleanliness and educating villagers to dig latrines to reduce the fly population. How is that going?

JH: In Ethiopia the initial strategy to combat trachoma was to build 10,000 latrines and thereby reduce the fly population. In the first year of our efforts, 89,000 latrines were built. That total is now close to 500,000 after four years. We found that women, who were culturally forbidden to be seen relieving themselves, felt emancipated by having latrines available and have been responsible for the unanticipated rate of progress. To encourage hygienic practices, water gourds are placed outside the latrines and everyone is taught to wash their hands and faces.

Trachoma, a bacterial infection, is treated with azithromycin (Zithromax), a drug donated by Pfizer Inc. The disease was present in Georgia up until the 1920s and 1930s, and it was through the same type of sanitation, hygiene and cleanliness practices that we were able to control it.

GM: Do you think today’s medical students care more about international service, and for those who don’t, why do you think they should?

JH: I think we go through cycles, but right now I think medical students are perhaps more interested in the world because of Internet communication and awareness of global relationships. No longer are we isolated from diseases around the world that now can be spread easily through international travel and trade.

Every time I return from Africa or from a rural village in China, I realize how fortunate we are here in the U.S. People who have two meals a day, clothing, and a roof over their heads are rich compared to those in other countries struggling to live on a dollar a day. It is gratifying to share knowledge and problem solving in ways that can improve lives dramatically.

Dr. John Hardman

After receiving his medical degree from the Medical College of Georgia, Dr. Hardman did a rotating internship at the University of Maryland Hospital, received his training in psychiatry as a resident at the Mayo Clinic from 1969-71, and completed a child psychiatry fellowship at Emory University from 1971-73.

He first served The Carter Center in 1989 by heading the Initiative to Reduce Global Tobacco Use and was the Center’s representative to the World Health Organization’s Tobacco and Health Program in 1990.

He directed the Center’s Mental Health Program from 1991-1993, became associate executive director in February 1992 and was appointed executive director in December 1992. In 2007, the Center’s Board of Trustees voted to change his title to president and chief executive officer.
Dr. Barbara L. Schuster has no trouble describing what it’s like to help create a new medical school campus from scratch.

“It’s fun and overwhelming simultaneously,” said Dr. Schuster, who is overseeing the development of the Medical College of Georgia-University of Georgia Medical Partnership Campus in Athens.

As campus dean, she’s the point person for the most ambitious expansion of medical education in recent Georgia history, and has a lot on her plate: a national accreditation to contend with, clinical programs to establish and more than two dozen faculty and staff to hire before the campus can admit its first class of 40 students in 2010.
“It’s like a jigsaw puzzle,” said Dr. Schuster, who was hired in October to oversee the partnership campus, the centerpiece of the state’s plan to boost medical student enrollment 60 percent during the next decade to stave off Georgia’s looming physician shortage.

The University System of Georgia Board of Regents-approved plan calls for MCG’s School of Medicine enrollment to increase from its current 745 to 1,200 by 2020 through the partnership campus in addition to clinical campuses for third- and fourth-year students in Albany and Savannah.

Dr. Schuster, an internist with a long history in medical education, was previously chair of the Department of Internal Medicine at Wright State University’s Boonshoft School of Medicine in Dayton, Ohio. She’ll be drawing on nearly every single one of her 30 years of experience in academic medicine as she manages the unprecedented cooperative effort between the state’s medical school and its largest research institution.

“What we need is a true partnership,” she said. “Forming a partnership is not easy; it’s hard work. It just doesn’t happen because somebody puts it on paper.”

Fortunately, Dr. Schuster has good people skills.

HARD SCIENCE, SOFT TOUCH

Dr. Schuster was born in Pennsylvania but grew up in South Bend, Ind., along with her older brother and younger sister. The family lived in the shadow of the University of Notre Dame, and her father would often take her to see the Fighting Irish do battle on the gridiron.

Going into medicine was solely her idea, but she cites her father’s interpersonal and leadership skills as major influences on her abilities as an educator, mentor and administrator.

continued on 46
“He was a social worker by education and a community leader and organizer by profession,” Dr. Schuster recalled. “I always loved science and biology, so I always had thoughts of becoming a physician, but I guess maybe I have my father’s people skills. It’s a good intersection.”

She briefly considered a career in basic science while attending medical school at the University of Rochester. She even worked in the laboratory of the MD/Ph.D program director. “The director of the lab explained to me that I had, as they say, more of a clinical personality,” Dr. Schuster said with a laugh. “I guess they turned out to be right, but I still love science and I really support science as a basis for medicine. I can appreciate the whole spectrum.”

Her blend of “hard” and “soft” skills are evidenced by her support of biopsychosocial medicine theory – developed by the late University of Rochester Medical Center internist/analyst Dr. George Engel – which posits psychological and social factors are as important as genes and pathogens in the context of disease and illness.

“I believe that 90 percent of one’s diagnoses are made by history,” she said. “So the ability to take a good history is your ability to communicate with your patient, to understand your patient, and to understand your patient’s nonverbals. It’s a skill you continue to perfect as the years go on.”

Dr. Schuster jumped into academic medicine immediately after earning her medical degree and completing her residency by accepting a position working in the University Health Service. Subsequently, she accepted the position of assistant program director of the University of Rochester’s affiliated hospitals program in internal medicine and, shortly thereafter, directing the combined internal medicine/pediatrics residency program.

At the time she was recruited as assistant program director, she was nine months pregnant with her son Benjamin and her husband, Richard, whom she met her freshman year of college at the University of Pennsylvania, had just formed an internal medicine practice with a former classmate.

“He said to me, you better find a job with a paycheck and health insurance because I’m not going to take any money home for the first six months,” Dr. Schuster said with a laugh. “And he didn’t, because he literally hung out a shingle.”

Though her entry into academia was out of necessity, she has always had a desire to be an educator. In fact, she taught high school for a year after earning her bachelor’s degree in biology.

“We are happy to have Dr. Schuster, a proven and passionate educator, physician and administrator, lead this innovative campus that will leverage the significant strengths of Georgia’s health sciences university and the state’s flagship institution of higher education. Expansion of physician education is critical to the health of our citizens and to the future of our rapidly growing state. The new, four-year Medical Partnership Campus in Athens will contribute significantly to this initiative.”

Dr. Daniel W. Rahn, president, Medical College of Georgia

“She is exactly the right person to lead this critical initiative to help address the shortage of physicians in Georgia. Her background and experience have prepared her for the challenge and opportunity of building the partnership from the ground up. I am pleased that our partnership with the Medical College of Georgia has taken this important step.”

Dr. Michael Adams, president, University of Georgia
and a master’s degree in education. Taking the year off before entering medical school put her husband a year ahead of her. That turned out to be a blessing for the young couple.

“It was probably a good thing we were not sitting in the same classes together taking the same exams,” she said. “His stressful weeks were not my stressful weeks.”

— A MENTOR AND A LEADER

Dr. Schuster’s string of academic appointments over the years culminated with her accepting the position of chair of the Department of Medicine at Wright State University in 1995, making her the first woman to hold the title.

But accepting the position as MCG-UGA Medical Partnership Campus dean has been her biggest career challenge to date. Those who have worked with her in the past say it’s a challenge she can handle.

“She is very savvy,” said Dr. Ann Nattinger, a professor at the Medical College of Wisconsin who was a primary care resident in Rochester when she first met Dr. Schuster. “She has this sense of spirit and optimism and organization all at the same time.”

Dr. Schuster, who recently received her license to practice in Georgia, never stopped seeing patients throughout her three decades in academic medicine. She said the experience has been invaluable in her career as an administrator.

“What happens when a patient comes into your office and screams at you?” she said. “It doesn’t happen often, but it will happen. The way you handle that communication teaches you to handle other situations. You could call that diplomacy…I tell people that my clinical skills are the most important skills I use.”

She is most proud of her role as an educator and mentor, particularly in the realm of graduate medical education as a residency program director, which she said helped put her on the path toward becoming a department chair.

“I’ve always said that being a program director was the best preparation I had for being a chair and I think it remains that way,” she said. “You have to learn organizational skills, but more importantly, you have to learn people skills. In the end, it’s all about the people.”

Several of Dr. Schuster’s former residents have themselves become residency program directors, while others have gone on to significant academic positions, including Dr. Patrick O’Connor, a chief of general internal medicine and professor at Yale School of Medicine.

Dr. Schuster introduced him to the basics of research by involving him in a clinical trial for an obesity drug, which eventually led him to become an investigator himself.

“For me, it was a career-changing experience. It really gave me the research bug,” said Dr. O’Connor, who worked under Dr. Schuster at Rochester’s residency program in the early 80s. “She was a key mentor for me, but for many other people as well.”

continued on 48

At a Glance

Title: MCG-UGA Medical Partnership Campus dean


Family: Husband Richard, son Benjamin

Education:

- University of Pennsylvania, BA (Biology)
- University of Pennsylvania, MS (Education)
- University of Rochester, MD

Academic appointments:

- Wright State University
  - Professor, Department of Geriatrics (Secondary Appointment), 2007
  - Professor of Medicine, 1995
  - Chair, Department of Medicine, 1995
- University of Rochester
  - Associate Professor of Medicine, 1989-1995
  - Assistant Professor of Medicine, 1983-1989
  - Senior Instructor in Medicine, 1980-1983
  - Assistant in Medicine, 1977-1980

Trivia:

She is not the first doctor in her family. Her older brother became a physician while her younger sister followed their father into social work.

Her son Benjamin is a lawyer with the public defender’s office in Tacoma, Wash. He married a classmate from law school last year.

Her hobbies include travel, swimming, cooking and reading. “I can’t walk into a bookstore without buying a book, particularly second-hand bookstores,” she said. “I’ve read some interesting books that weren’t very expensive.”
“Dr. Schuster is a strong addition to the MCG School of Medicine dean’s staff, and to our academic faculty. As the MCG/UGA Medical Partnership Campus dean in Athens, Barbara is rapidly emerging as a valuable asset to the University System of Georgia’s strategic response to the state’s growing physician manpower crisis. I am confident that she will be a ‘hit’ with our students in Athens from day one.”

Dr. D. Douglas Miller, dean and senior vice president for health affairs, Medical College of Georgia

“I am very excited and pleased that she has accepted our offer to become the first campus dean of the medical partnership. She possesses the expertise, experience and managerial and personal attributes to provide the leadership essential to address the education of physicians to meet Georgia’s increasing shortage of doctors. I look forward to working with her, the Medical College of Georgia and the local medical community in advancing this partnership.”

Dr. Arnett C. Mace Jr., senior vice president for academic affairs and provost, University of Georgia

The way Dr. Schuster sees it, advancing the careers of dozens of academic physicians benefits her as much as it does them. “There’s nothing more satisfying than watching a student or resident succeed, or developing a young faculty member and watching them become successful down the line,” she said.

THE ROAD AHEAD

Dr. Schuster spent the first two months at the partnership campus commuting from Ohio. Now that she and her husband (who has accepted a faculty position in UGA’s College of Public Health) have bought a home in Athens, she feels like life has returned to normal.

“I said to myself, ‘I think I’m getting into a routine again,’” she said.

But she knows the next year will be anything but routine as she puts the jigsaw puzzle together. The partnership campus will initially be at the historic Athens Factory property, better known as the O’Malley’s building, whose renovations will be complete in June. The long-term goal is to locate the campus to the 58-acre Navy Supply Corps School north of campus after the Navy leaves the property in 2011.

The “fist-pump moment,” Dr. Schuster said, will be when she sees the first 40 students attending classes in fall 2010. The ultimate goal, of course, is to improve the quality of health care in Georgia by increasing its number of physicians.

And in a state ranked fourth in population growth but 41st in physicians per capita, the stakes are high.

“I never said I liked small challenges,” she said.
Dr. Barbara Schuster is not alone in helping the Medical College of Georgia School of Medicine expand physician education throughout the state.

The four-year campus she is helping develop in Athens through a partnership with the University of Georgia will be complemented by existing satellite campuses in Albany and Savannah, Ga., where third- and fourth-year students receive clinical training. Both campuses are continuing to expand toward the 10-year goal of 60 students doing clinical rotations.

“By sending students out to the community for part of their education, they will see firsthand the high quality of care that is being delivered, the essential role that physicians play in a small town and the rewards of caring for patients in more rural areas,” said Dr. Linda Boyd, MCG School of Medicine associate dean for regional medical campus coordination. “We hope that this will translate to more students choosing to return to smaller communities to practice once they finish their training.”

The Southwest Georgia Clinical Campus in Albany, headed by Assistant Dean Dr. Iqbal Khan, is headquartered at Phoebe Putney Memorial Hospital but includes smaller community hospitals in a mostly rural region that stretches from Valdosta to just outside Columbus.

Dr. Kahn said the medical community has been very receptive to taking MCG students on their four- to eight-week rotations, depending on the particular clerkship, because many are MCG alumni who want to help their alma mater train the next generation of physicians. Community leaders are excited about the relationship because of the prospect of attracting future physicians to their communities.

“(Southwest Georgia) is one of the most underserved areas,” said Dr. Kahn, who was appointed assistant dean in 2005.

Georgia’s rapidly growing coastal area is where MCG students are making their clinical rotations as part of the Southeast Georgia Clinical Campus based at St. Joseph’s/Candler Health System in Savannah. Other campus partners include Southeast Georgia Health Systems in Brunswick and St. Mary’s in Camden County.

As in Albany, the medical community has been very receptive to partnering with the state’s flagship medical university, said Dr. Kathryn Martin, assistant dean of the Southeast Campus.

“We are fortunate to have a strong commitment to medical education in coastal Georgia from MCG alumni and other physicians pledged to providing excellent role models for future physicians,” said Dr. Martin, a former Chatham County, Ga., public health official who joined MCG in 2008.

“Coastal Georgia is an economic driver for our state and, collectively, we must assure that our citizens and our environment are healthy.”

Dr. Boyd said Georgia has few residency programs for a state its size this large. However, she said she is encouraged by the support from community hospitals and partners around the state, such as the Area Health Education Centers (AHEC) network, which helps increase primary care services in underserved areas through recruitment, training and retention initiatives.

“We could not consider expanding our class size without the support of our many clinical faculty around the state, our community hospital affiliates, and of course, the AHEC who helps us in numerous ways,” she said.
When many physicians reflect on their “college days,” it’s their undergraduate education that evokes the most reverence.

But that’s not the case for Dr. Todd S. Jarrell. To him, medical school was his college days.

“I’ve always thought of undergraduate (education) as a steppingstone,” said Todd, a 1983 graduate of the Medical College of Georgia School of Medicine who earned his bachelor’s degree at the University of Georgia. “The people I went to MCG with are some of my closest friends.”

“As far as I’m concerned,” he said, “I owe my very existence to MCG. I am what I am because of it.”

The private practice urologist in Columbus, Ga., does more than simply look back fondly on his time at MCG – he remains one of the school’s most active alumni. In addition to being a member of the President’s Club at the Founder’s Level, he is a lifetime member of the School of Medicine Alumni Association as well as former board member and current member of its Columbus Regional Committee.

His leadership and philanthropy is no anomaly – it’s a family tradition.

Todd’s father Floyd and his uncle Harold, class of ’46 and ’49, respectively, have been giving back to MCG since the 1950s and were instrumental in forming the School of Medicine Alumni Association in the 1970s. Additionally, Floyd established the Floyd C. Jarrell Jr., M.D., Distinguished Chair in Surgical Oncology in 2003.

Today, as MCG is expanding in Augusta and beyond, Todd is giving his support to the MCG-affiliated Georgia Health Sciences University Foundation.

“As far as I’m concerned, I owe my very existence to MCG. I am what I am because of it.”

— Todd Jarrell

Family Tradition
Jarrell legacy of service continues at MCG

The Jarrells in MCG yearbook photos: from left, Floyd in 1946, Harold in 1949 and Todd in 1983

PILLARS
BY DAMON CLINE

The Jarrell Family
The extended Jarrell family attended last year’s Dr. Clarence C. Butler Service and Leadership Award ceremony, where Floyd and Harold were honored for their lifelong contributions to the region’s medical community. (From left) Todd Jarrell, Ben and Kathryn Cheek, Floyd, Harold and Harold “George” Jr., and Pat Yancey.

In addition to his father and uncle, four of Dr. Jarrell’s cousins are MCG graduates – Dr. Harold “George” Jarrell Jr., Dr. Ben Cheek, Dr. Pat Yancey and Dr. Sammy “Al” Caves. He and his wife, Kris, an assistant professor at Columbus State University, have two daughters pursuing a medical education: Caroline, who is attending dental school at the Medical University of South Carolina, and Sarah, who will enroll in the Mercer University School of Medicine in the fall.

Though Todd’s four siblings didn’t pursue a career in medicine, he knew early on that he would follow in his father’s footsteps. “It’s just something that, growing up, I’ve always wanted to do,” he said.

He decided on a specialty while working summers at Doctors Hospital in Columbus, where he has since served as chair of the department of surgery. He made his choice after careful observation of his peers.

“The urologists seemed to be the happiest people,” he said.

He was still a medical student when he married Kris, whom he met at UGA, where she was working on a master’s degree in education. While the couple lived in Augusta, Kris worked as a teacher at the Academy of Richmond County and Augusta State University while Todd finished school and his residency at MCG.

When Todd, 51, attended MCG, neither the Children’s Medical Center nor the Ambulatory Care Center existed. And the adjacent VA Medical Center was a brand new building. But when his father and uncle attended MCG, it was still called the University of Georgia School Of Medicine.

continued on 52

The Jarrell family and its relatives have roots that run deep and wide at MCG:

Dr. Floyd C. Jarrell Jr., ophthalmology/otolaryngology, ’46
Dr. Harold G. Jarrell (Floyd’s younger brother), Obstetrics/gynecology, ’49
Dr. Todd S. Jarrell (Floyd’s son), urology, ’83
Dr. Harold “George” Jarrell Jr. (Harold’s son), anesthesiology, ’87
Dr. Pat Yancey (Todd’s cousin), dentistry, ’87
Dr. Ben H. Cheek (Todd’s cousin), Obstetrics/gynecology, ’82
Dr. Kathryn Cheek (Ben’s wife), pediatrics, ’88
Dr. Sammy “Al” Caves, (Todd’s cousin), dentistry, ’73
Hugh Cheek (Ben and Kathryn’s son), medical student, ’12

GEORGIA Medicine 51
The brothers, the two youngest siblings in a family of 10 growing up in Depression-era east Georgia, were inspired by the town doctor to pursue a career in medicine. They followed a similar trajectory to MCG, via the University of Georgia, and beyond, via the U.S. Army.

Floyd was the first to report to Fort Sam Houston in San Antonio after medical school. He was one of 30 out of 2,400 doctors in the Army Medical Corps to be selected for advanced ophthalmology/otolaryngology training at Letterman General Hospital in San Francisco before his one-year assignment to the 172nd Station Hospital in Sendai, Japan.

“It was a wonderful experience,” Floyd, 86, recalled of his experience in postwar Japan, which included trips to Kyoto, Sapporo and the Toshogu Shrine, famous for its carving of the “three wise monkeys,” in Nikko.

Brother Harold, an obstetrician/gynecologist, also received an overseas assignment from the Medical Corps.

“In all of the world, where do you think they would send him?” Todd says with a smile.

None other than the 172nd Station Hospital in Sendai. The base staff and its Japanese civilian employees were initially taken aback by the arrival of Harold, who bears a striking resemblance to his older brother.

“The secretary there took a look at him and said, “Jarrell-san, you’ve come back!” Floyd said.

After returning to the states, the brothers completed their graduate medical education and eventually went into private practice in Columbus, Ga. Floyd, one of the last “double ENTs” before the specialties were separated, chose to focus on ophthalmology and founded West Georgia Eye Care in 1951. As one of only a handful of specialists in town, he introduced the community to new procedures such as cataract surgery. The practice has since grown to 10 physicians and is the region’s largest multi-specialty eye center.

“I never dreamed something I began as a solo practice would amount to that, but it has,” said Floyd, who retired from the practice after 42 years in 1993. “Even since my retirement, the changes that have occurred in ophthalmology have been unbelievable. It’s wonderful to see the progress in medicine.”

Harold founded OB/GYN Associates in 1955 and headed the MCG-affiliated OB/GYN residency program in Columbus, which experienced a massive postwar baby boom because of its proximity to Fort Benning but had few physicians and practically no specialists.

“I helped bring anesthesia here; there were anesthesiologists everywhere else in the state but here,” Harold recalled. “My first year here I was delivering more babies than anyone in town. We had people coming all the way up from Florida.”

Dr. Todd Jarrell speaks with Dr. Glenn and Judy Barnwell during a School of Medicine Alumni Association reception at his home in Columbus in January.
Harold retired in 1994 after delivering nearly 15,000 babies. OB/GYN Associates now has seven physicians, including Todd’s cousin, Dr. Ben Cheek, who now manages the operation. Dr. Cheek and his wife, Dr. Kathryn Cheek, a Columbus pediatrician, have a son, Hugh, currently enrolled in the School of Medicine.

Floyd and Harold were both honored last year as recipients of the Dr. Clarence C. Butler Service and Leadership Award from Columbus’ St. Francis Hospital for their lifelong contributions to the west Georgia medical community.

“You have lived true to your family and lived out your medical mission,” Todd said at the black-tie gala attended by more than 700 people. “Thank you on behalf of my generation of physicians.”

Todd has become a community leader in his own right, having chaired the departments of surgery at several Columbus-area hospitals and served as president of the Muscogee County Medical Society. At the statewide level, he was appointed by then-Gov. Zell Miller to the board of the Georgia Department of Human Resources, where he served as both vice chairman and chairman of the board.

For his alma mater, he has served as chairman of his 25th reunion and has hosted alumni receptions in his hometown, where his practice, Urology Associates of Columbus, recently added its fourth physician.

For the work he does for the MCG community and the community in which he lives, he modestly says it’s the least he could do.

“It’s a privilege to be part of such a legacy in Columbus and at MCG,” Todd said. “I look at giving back to those who have given to me as not only a duty, but an honor.”

“It’s a privilege to be part of such a legacy in Columbus and at MCG. I look at giving back to those who have given to me as not only a duty, but an honor.”

TODD JARRELL

Caroline (left) and Sarah Jarrell

COURTESY OF THE JARRELL FAMILY

GEORGIA Medicine 53
The Greatest Gift: Education

One of the greatest gifts that can be given is the gift of education. The Medical College of Georgia is proud to provide a strong educational foundation for our students with an emphasis on patients and an integrative approach to learning that reflects how modern medicine is practiced.

Please consider supporting medical student scholarships at MCG in one of the following ways:

1. **Adopt a Medical Student**
   This innovative new program will bring donors and students together like never before. Your $40,000 commitment (payable over five years) will be used to fund a partial scholarship for a student during his or her time at MCG and will also ensure a perpetual income stream for future generations of medical students.

2. **MCG School of Medicine General Scholarship Fund**
   Gifts of any amount can be designated to our general scholarship fund.

3. **Create a New Scholarship Endowment**
   You may choose to create a named scholarship endowment in honor or memory of a loved one, a faculty member, a mentor, or yourself. Gifts of $100,000 are recommended (but not required) to start a new scholarship endowment.

Your scholarship gifts may offer significant tax benefits and can be made with cash, appreciated securities, real estate or a combination of assets. If you have an interest to support a specific scholarship directive (such as need-based or merit-based), please indicate that when you make your contribution. The Georgia Health Sciences University Foundation will accept gifts designated for the MCG School of Medicine scholarship programs mentioned above.

Private philanthropy is largely responsible for many of the programs, initiatives, and educational opportunities MCG is able to offer its students. Your investment in MCG scholarship funds ensures that our School of Medicine will continue to graduate men and women of purpose and integrity who are well-equipped to serve the citizens of Georgia and beyond.

Please contact me in the Office of Development with any questions. I look forward to helping you facilitate gifts to support our medical students.

For more information on making a gift to the MCG School of Medicine, contact Mr. Duva at 1-800-869-1113, 706-721-1939 or aduva@mcg.edu

Thank you for your continued support of the MCG School of Medicine.
1950s

Dr. Lamar S. McGinnis 54
has been elected president-elect of the American College of Surgeons. Dr. McGinnis, who completed surgical residencies at the University of Texas Medical Center in Galveston, Texas and Bellevue Hospital in New York City, is board certified in general surgery and is a fellow of the American College of Surgeons. He is a past national president of the American Cancer Society and a member of the DeKalb Medical Society, Medical Association of Georgia and Georgia Surgical Society. He retired from private practice in 2002 and has advanced medicine in various volunteer capacities. He received the American College of Surgeons’ 1998 Distinguished Service Award and was named its second vice president in 2001.

1960s

Dr. Murray Freedman 64
has received the 2008 North American Menopause Society/Novo Nordisk Inc. Vaginal Health Research Award for his many contributions to vaginal, peri- and postmenopausal health care. These include original clinical research in vaginal atrophy in estrogen-depleted women and nationwide lectures and participation on numerous boards and panels regarding vaginal health. Dr. Freedman practices gynecology in Augusta and is a clinical professor of obstetrics/gynecology at MCG.

1970s

Dr. John A. Mitas II 73
is in his seventh year as deputy executive vice president and chief operating officer of the American College of Physicians. After graduating from MCG, he trained in internal medicine and nephrology. He taught at the University of Oklahoma Health Sciences Center from 1982-84 as a nephrologist and head of dialysis, then served active duty in the U.S. Navy. After retiring in 2000, he worked for a vaccine company designing clinical trials for smallpox and anthrax vaccines before joining the American College of Physicians. He still hopes to do some writing and “fun” traveling. He and wife Rosalind have been married for 31 years and have three grown children, “all doing well in their own right,” he says.

Dr. Ora J. Wells 77
a pediatrician in Brevard, N.C., recently hosted a free program at Brevard’s Transylvania Community Hospital on LaCrosse encephalitis, the most common mosquito-borne virus in North Carolina.

1980s

Dr. Stuart Sanders 82
is the first recipient of the Greenville Hospital System Internal Medicine Residency Program’s Distinguished Alumnus Award. He was recently named chair of the World Heart Games 2010 of the American College of Sports Medicine. He is a clinical professor of medicine at Emory University. His son, Carson, is a first-year medical student at MCG.

Dr. W. Dennis Taylor Jr. 87
has been appointed to Georgia’s State Board of Nursing Home Administrators by Gov. Sonny Perdue. He owns Southeast Geriatrics and is a member of the American Medical Directors Association, the Medical Association of Georgia and the Southern Medical Association. He is a past president of the Georgia Medical Directors Association and is certified in internal medicine and geriatrics. He and wife Jenny have two children.

Dr. M. Clayton Pulliam 88
has joined the medical staff at Habersham Medical Center and has started a family medicine practice in Demorest, Ga. Dr. Pulliam is a member and Fellow of the American Academy of Family Physicians and had been practicing in Rabun County. He completed his internship at the University of Alabama and his family medicine residency at Anderson Memorial Hospital in Anderson, S.C. Dr. Pulliam has previously been employed with Mountain Lakes Community Healthcare in Dillard, Ga., and Southeastern Health Services in Stone Mountain and has spent most of his career in private practice in his hometown of Covington, Ga.
Dr. Gary Klein has been named chief medical officer of Vangent Inc., a global provider of information management and strategic business process outsourcing solutions. He will oversee health information management and technology solutions for Vangent’s health care customers. Dr. Klein has worked with the U.S. Department of Homeland Security, the Department of Defense, Kaiser Permanente and Sanofi Pharmaceuticals Inc. He is president of the American Academy of Disaster Medicine and a former chair of the American Academy of Urgent Care Medicine Board of Directors.

Dr. Loren J. Smith has joined Signature Urology in Shreveport, La., after serving as a commander in the U.S. Navy. At his last duty station, he directed surgical services and the U.S. Naval Hospital Department of Urology in Rota, Spain.

Dr. David John Yeh has joined the Hattiesburg Clinic neurological surgery department. He completed a general surgery internship and neurosurgery residency at MCG and previously served on the staff of Johnson City Medical Center in Johnson City, Tenn.

Dr. Jennifer Garst is a medical oncologist and lung cancer specialist with Regional Cancer Care in Durham, N.C. She previously served as an associate professor of medicine at Duke University Medical Center, where she was the principal investigator on the first study to use genomic information from a lung tumor to customize treatment. She was named a 2008 Healthcare Hero by the Triangle Business Journal. She has received the American Cancer Society’s Relay for Life Professional Caregiver Award and is a member of the International Association for the Study of Lung Cancer, the American Society of Clinical Oncology and the North Carolina Oncology Society.

Dr. Chad Kessler practices orthopedics for Georgia Bone & Joint Orthopaedic Specialists in Newnan, Ga. He is one of the few physicians nationwide who practices extreme lateral interbody fusion (XLIF), a minimally invasive spine fusion surgery. His interest in spine surgery originated in medical school, where he studied under Dr. Allan Goodrich. Dr. Goodrich wrote a book, Extreme Lateral Interbody Fusion (Quality Medical Publishing, 2008), with Dr. Kessler co-writing one of the chapters. Dr. Kessler completed spine surgery training at MCG and a fellowship in the subspecialty in Louisville, Ky.

In Memory

Dr. Charles Kenneth Singleton Sr. died Nov. 3 at age 86. He practiced in Cairo, Ga., from 1952 until his retirement in 1990. After retirement, he worked at Archbold Memorial Hospital’s emergency room for several years. In 2005, he and wife Lucille moved to Newnan to be near their children. Survivors in addition to his wife include six children, eight grandchildren and two great-grandchildren.

Dr. Byron H. Dunn died Nov. 15. Dr. Dunn, who completed an obstetrics/gynecology residency at MCG after earning his medical degree, practiced in DeKalb County for 20 years before moving his office and practice to Conyers, Ga., for 15 more years. He retired in 1993, enjoying his farm, his vegetable garden and his dogs. Also that year, he and wife Betty established the Byron H. Dunn, M.D. and Betty James Dunn Chair in the MCG Department of Obstetrics and Gynecology. He was a diplomat of the American Board of Obstetrics and Gynecology and an Emeritus member of the MCG Foundation. Dr. Dunn received MCG’s 2003 Vessel of Life Award. Survivors include his wife, three children and seven grandchildren.

Calling All Alumni

Our alumni are scattered across the country, even around the world, so we are working on a publication designed to help bring them back together. This new directory will include comprehensive biographical listings with contact information, career overviews and family highlights.

To make sure our directory is up to date, our publisher, Harris Connect, will be contacting alumni. Please help us make this publication a fun and useful reference for you and your fellow alumni by providing the most current information.
**By the Numbers**

- **750** Students
- **747** Students from Georgia
- **476** Residents
- **62** Basic Science Faculty
- **402** Clinical Science Faculty
- **198** Principal Investigators (including clinical trials)
- **$65.6 \text{ m}** Sponsored Research Dollars
- **$43.2 \text{ m}** NIH Research Grant Dollars
- **217** NIH Research Grants
- **7,350** Current Alumni
- **54.9** Percentage of Alumni Living in Georgia
- **$3.8 \text{ m}** Philanthropic Giving (cash and pledges)
- **47** Endowed Chairs and Professorships
- **31** Scholarship Funds
- **46** Dedicated Research Funds

**Source:** MCG Office of Decision Support

**Administration**

- **Dean**
  - D. Douglas Miller
- **Vice Dean for Academic Affairs**
  - Ruth-Marie Fincher
- **MCG-UGA Medical Partnership Campus Dean**
  - Barbara Schuster
- **Senior Associate Deans**
  - John D. Catravas
  - Joseph Hobbs
  - Walter J. Moore
  - Anthony L. Mulloy
- **Associate Deans**
  - Andrew T. Albritton
  - Kathleen M. McKie
  - Linda Boyd
  - Peter F. Buckley
  - Andria Thomas
  - Christopher White
  - Geoffrey H. Young
- **Assistant Deans**
  - Iqbal M. Khan
  - Kathryn Martin
  - Wilma Sykes-Brown
- **Executive Associate Dean for Administration**
  - Michael A. Herbert
- **Chief of Staff**
  - Donna Dauphinais
- **Director of Operations**
  - Joel Covar
Our students learn alongside health care professionals in private offices, clinics and hospitals in 112 Georgia counties. Our graduates practice in 154 counties. Our mission is to improve health and reduce the burden of illness in society. Our commitment is to take the lead in meeting the health care needs of our state.

MCG Teaching Sites:
- Medicine
- Nursing
- Dentistry
- Allied Health Sciences
- MCG Health Inc.

We are Georgia’s Health Sciences University.