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Country music stars and Vanderbilt in perfect harmony **19**

Brain surgery unlocks songwriter's lyrics **26**

MUSIC CITY MEDICINE

Uplifting Experience

Soon-to-be-married Vanderbilt University School of Medicine graduates, Lara Hershcovitch, M.D., and Charles Phillips, M.D., get a leg up on celebrating. See inside back cover for more commencement photos.



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Vanderbilt**Medicine**

SUMMER 2011

:: on the cover

This issue is devoted to telling stories about how Vanderbilt University Medical Center and Nashville's music community are more closely interwoven than ever.

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Look for these stories and multimedia features online at www.mc.vanderbilt.edu/vanderbiltmedicine.

VIDEO: Singer-songwriter Beth Nielsen Chapman performs at the Vanderbilt-Ingram Cancer Center Survivor's Luncheon.

VIDEO: Take a look inside Vanderbilt's renowned Voice Center and follow a singer as he undergoes treatment.



BY JEFF BALSER, M.D., PH.D. Vice Chancellor for Health Affairs Dean of Vanderbilt University School of Medicine

you drive through Nashville at 2:30 in the morning, there are at least two places where you are guaranteed to see the lights on and people hard at work: the recording studios of Music Row, and the hospitals and laboratories at Vanderbilt University Medical Center.

Music and health care may not on the surface seem to have a lot in common, but I think they're more related than we know. Both are round-the-clock passions that people are drawn to because they help us connect to each other.

It's no secret that for too long these two emblems of Nashville's greatness, music and health care, moved in different worlds. The three blocks between the labs of VUMC and the studios and offices of Music Row might as well have been 300 miles.

One of the turning points in that relationship was our partnership that we began almost 20 years ago with the T.J. Martell Foundation, a leading music business charity, to establish the Frances Williams Preston Laboratory, one of the linchpins of the Vanderbilt-Ingram Cancer Center.

More recently, the close relationship between the members of Rascal Flatts and the Monroe Carell Jr. Children's Hospital at Vanderbilt led us to rename the pediatric surgical suite the Rascal Flatts Surgery Center.

So, for these reasons and others, now, thanks to the efforts of many at both Vanderbilt and in the music community, I'm proud to say that the old divisions are no more. This edition of *Vanderbilt Medicine* is devoted to telling stories demonstrating how the Medical Center and the music community are more interwoven than ever before.

Among the stories you'll discover:

• That on any given day of the week, music stars are on our campus visiting our patients, singing to entertain patients and families, and taking away lessons about life to power their creativity.

• How the singer-songwriter Beth Nielsen Chapman discovered a deep well of music within herself after the removal of a benign brain tumor.

• How Gary Allan's voice found new life thanks to the Vanderbilt Voice Center, meaning that Allan joined Johnny Cash, Kathy Mattea, Patty Loveless, Emmylou Harris, Jack White, Trisha Yearwood, and many other musical greats who have been treated at our world-renowned facility.

• The healing power of music, as revealed through the music therapy program and through Musicians on Call, a program that allows musicians to share their gifts when patients need it most.

• That among the lab-coat-andscrubs world of our Medical Center, we have plenty of people who love to play music for fun, the most famous example being our own VUMC "house band," Soul Incision.

The music never stops, and the work of a great medical center never stops. And it's wonderful that, sharing our passions just as we share our neighborhood, music and medicine are moving forward in harmony. VM

AROUND THE " MEDICAL CENTER

News and happenings at Vanderbilt University Medical Center

New center integrates care of patients with concussions

The Vanderbilt Sports Concussion Center, is a new, joint venture between the Vanderbilt Orthopaedics Institute and Vanderbilt Neurosciences Institute that will integrate and standardize the care of pediatric and adult patients with concussions at all Vanderbilt hospitals and clinics.

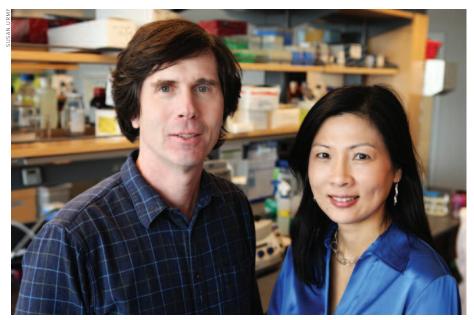
Athletes at every level, from grade school to professional, will be treated and given the same state-of-the-art care, using the latest technology and research findings whether they enter the Vanderbilt system through an emergency room visit, an evaluation by an athletic trainer during competition or a referral by a primary care physician.

"It's a big effort and involves not just those providers on campus but in Williamson County and outlying clinics in Tennessee and Kentucky," said Allen Sills, M.D., associate professor of Neurological Surgery, who will lead the Concussion Center along with Gary Solomon, Ph.D., and Andrew Gregory, M.D.

Prior to forming the Concussion Center, treatments were providerspecific. Now, using the electronic medical record, there is a standardized symptom checklist and neurocognitive and balance assessments.

"The challenge with concussion is diagnosis because you can't see a concussion on the outside. Most patients look normal and have normal brain scans but still may have a very significant injury. That's where you need a provider who knows the right questions to ask, the right assessment tools to use and right strategies for managing the concussion," Sills said.

The Concussion Center will offer ImPACT, a computerized concussion evaluation system that measures baseline reaction time, memory and attention span, which can be compared to post-injury tests to track an athlete's recovery and assist in determining a safe time to return to play. VM



John Kuchtey, Ph.D., Rachel Kuchtey, M.D., Ph.D., and colleagues have identified a new candidate gene for a common form of glaucoma.

Identification of glaucoma gene brightens future for therapies

Glaucoma, a leading cause of vision loss and blindness worldwide, runs in families. A team of investigators from Vanderbilt University and the University of Florida has identified a new candidate gene for the most common form of the eye disorder, primary open angle glaucoma (POAG).

The findings, reported in the open-access journal *PLoS Genetics*, offer novel insights into glaucoma pathology and could lead to targeted treatment strategies.

Elevated pressure inside the eye is a strong risk factor for POAG. Pressure increases because of increased resistance to the flow of aqueous humor out of the eye's front chamber (between the cornea and iris). Current treatments for POAG attempt to reduce intraocular pressure by reducing aqueous humor production or by surgically providing a clear "drain."

The new gene, called ADAMTS10, encodes a protein involved in processing extracellular matrix, the connective and structural support tissue around cells. It's also highly expressed in the specialized eye tissue that filters aqueous humor. Both findings support a role for the gene in aqueous humor outflow.

"Right now we know that aqueous humor outflow is impaired in POAG, but we have no way to fix it," said Rachel Kuchtey, M.D., Ph.D., assistant professor of Ophthalmology and Visual Sciences and principal investigator of the study. "If this gene plays a role in aqueous outflow regulation, we can begin to look at it – or its molecular partners – as targets for treatment."

John Kuchtey, Ph.D., research instructor in Ophthalmology and Visual Sciences is the study's first author. ${\bf v}{\bf M}$

- LEIGH MACMILLAN

Potassium channel gene modifies epilepsy risk

Epilepsy – a group of disorders characterized by disturbed brain electrical activity and seizures – affects about 1 percent of the world's population.

Inherited epilepsies can be caused by a number of different genetic mutations. But the clinical severity of inherited epilepsies, even in individuals who have the same single-gene mutation, varies widely – from mild childhood seizures that resolve with age to severe lifelong seizures.

The range of clinical severity "tells us that there are other factors that contribute," said Jennifer Kearney, Ph.D., assistant professor of Medicine at Vanderbilt University School of Medicine. "We think that susceptibility and resistance genes that are inherited in addition to the primary mutation are probably a major factor."

Now, Kearney and colleagues including Alfred George Jr., M.D., director of the Division of Genetic Medicine, have identified a susceptibility gene that can influence a person's risk for developing epilepsy.

The gene, KCNV2, codes for a unique type of potassium channel, a protein that participates in the electrical activity of nerve cells. The researchers found that variations in the gene – discovered in pediatric patients with epilepsy – affected the function of the potassium channel.

"The mutations make a neuron more excitable, so you could have longer periods of excitation and also repetitive excitation (that leads to seizures)," Kearney said.

The findings, reported in the Proceedings of the National Academy of Sciences, could improve molecular diagnostic tools and point to novel targets for antiepileptic drugs that fine-tune neuronal excitability. VM

- LEIGH MACMILLAN

Shalom Foundation, VU establish Guatemala clinic

Surgeons, nurses and staff at Monroe Carell Jr. Children's Hospital at Vanderbilt helped open a long-awaited and much-needed surgical facility during a recent mission trip to Guatemala.

Personnel from Children's Hospital have been traveling to the poverty-stricken nation twice a year since 2006, and have performed free surgeries on nearly 300 impoverished children.

"This clinic helps achieve our international care commitment and fulfills our mission to serve needy children in Third World countries," said John W. Brock III, M.D., surgeon-in-chief of Children's Hospital. "With this center, we are able to provide a continuity of great care for the children of Guatemala."

The new facility, the Moore Pediatric Surgery Center, has been four years in the making and was a vision of the Shalom Foundation, a Franklin-based non-profit humanitarian aid organization. Children's Hospital has offered support to the foundation over the years to help give children access to quality medical and surgical care.

The center will serve as the base for all future surgeries during mission trips. A team of 14-17 staff attends each trip. Previously, surgeons relied on area hospitals to do various surgeries, including general surgery and urology and plastic surgeries.

Several years of renovations were required to transform the center's 12,000square-foot structure into a space equipped for medical and surgical care. It has three operating rooms and beds for pre-operation, intensive care and recovery.

"The Moore Pediatric Surgery Center provides a safe and well-equipped space for our faculty and staff to bring their skills to the bedside of Guatemalan children," said Caroline Hale, project coordinator for the International Services Program for Children's Hospital. "Regardless of the setting, our nurses and doctors still provide the same high-quality care and develop powerful relations with the Guatemalan families." VM

- CHRISTINA ECHEGARAY



Carlos Del Cid and members of his care team from Vanderbilt, Anna Brummel, R.N., center, and Caroline Hale, give the thumbs up sign following his procedure at the new Moore Pediatric Surgery Center in Guatemala.



Where are they now? José Hagan, M.D., M.S., left, is completing a fellowship in infectious diseases at Washington University's Barnes-Jewish Hospital. Michael Kinzer, M.D., MPH, is completing a five-year service commitment to the U.S. Navy.

Friendship leads to prank – prank leads to legend

He survived 10 years, two deans, two chancellors, periodic debate about his appropriateness, and one or two relocations. Now, just weeks after his portrait was removed from 208 Light Hall, the legend of Yoda is revealed.

All good things must come to an end. And while both the positive and negative attributes of his presence in 208 Light Hall were the subject of debate, few can deny Yoda was a darned good prank.

Yoda made his first appearance during Anatomy 101 class, around Halloween 2001. A poster of the fictional, greenskinned Jedi master from "Star Wars," portrayed in pointy ears and dingy robes, was placed in a frame and hung on the brick wall alongside oil paintings of past leaders of the Vanderbilt University School of Medicine. After nearly a decade of anonymity, the identities of the students who put him there as a prank are revealed. Michael Kinzer, M.D., MPH, and José Hagan, M.D., M.S., members of the Class of 2006, were perhaps best known for their love of adventure and infectious diseases. But the 2004-2005 Fogarty Scholars say they were always looking for an opportunity to pull off a good stunt.

Driven by rascality, Kinzer and Hagan purchased the poster of Yoda at a clearance sale, selecting it for its appropriately austere color scheme and tone, and placed it in a distressed frame from a flea market painting. They snuck into Light Hall's first-year lecture room before dawn for what they imagined would be a short-lived guffaw.

"My roommate, Jesse Shaver, came along to take care of any witnesses. The plan was to quietly sit back the next morning and watch 100 doubletakes. We were both somewhat disappointed and delighted to see that nobody noticed at first. I think I bet Mike it would be up for a whole week before we had to go sit in Dean Miller's office," Hagan said.

In fact Senior Associate Dean Bonnie Miller, M.D., did notice, but not until the white coat ceremony in August of 2002 when Hagan upped the ante by moving Yoda to a more prominent spot in the ceremonial 208 auditorium.

Miller recalls it this way: "It was hanging when I arrived in Light Hall around 7 a.m. We took it down, but somehow within 15 minutes it was back up again. At that point we decided to let it go and take our chances. Both (former Dean) Gabbe and (former Vice-Chancellor) Jacobson thought it was funny."

Scott Rodgers, M.D., associate dean for Medical Student Affairs, says he not only accepted Yoda, he used him as a recruitment tool.

"I would point it out because it speaks to the sense of humor that the students have and that all of us have at Vanderbilt and our ability to poke fun at ourselves and laugh a little bit and just enjoy life," Rodgers said.

Now the prank has finally come to a close. Plans for a Gallery of Innovation are under way, which will spotlight the prominence of Vanderbilt's Nobel Laureates. While the details of the gallery are being worked out, Yoda was removed from the wall and can be found in the medical student lounge. Current students say they welcome the refugee Jedi.

"He has inspired years of VMS students to explore their inner 'force," said Jorden Cohen, VMS1. VM - CAROLE BARTOO



Please visit www.mc.vanderbilt.edu/vanderbiltmedicine to read the full text of how the culprits laid out details of this prank and to hear what current medical students have to say about Yoda, pictured above on right.

Student project takes affordable produce to community

About 100 people turned out for the launch of the Nashville Mobile Market in February at the Edgehill Apartments, on 12th Avenue South in Nashville.

The project, a collaborative effort between Vanderbilt students and the Edgehill community, is designed to provide healthy, affordable produce in an area of Nashville that has little access to these foods.

Second-year medical student Ravi Patel worked on a research project based on the concept of bringing produce to the area in a mobile trailer and said the students gained as much from this experience as the community.

A donation from the Frist Foundation allowed for the purchase of a suitable trailer, and the project took shape through the hard work of community members and several Vanderbilt students.

Nashville Mobile Market will run every Friday to Sunday, making stops at Gernert Homes, Youth Life Center parking lot at the Parks at Hillside, Edgehill Apartments Management Office, Edgehill Center and Progressive Baptist Church. Volunteers operate the truck and lead nutrition education. VM

- CAROLE BARTOO



Kareta Owens, right, is helped by Vanderbilt students Alexandra Ernst, left, Priya Chaturvedi and Emily Zern.

WEB LINK For more information, go to www.NashvilleMobileMarket.org

New endowed chair holders recognized



The academic tradition of endowed chairs dates back to 1502, when Margaret of Richmond, mother of Henry VII, established the Lady Margaret Professorship of Divinity at Oxford University. Endowed chairs are the hallmark of great universities, and that tradition continues at Vanderbilt. This spring 21 Vanderbilt University faculty members who have been named to endowed chairs, 10 from the School of Medicine, were honored for their achievements.

A total of six celebrations will be held in 2011 to honor 60 new endowed chair holders, said Richard McCarty, Ph.D., Vanderbilt's provost and vice chancellor for Academic Affairs.

The major university initiative to recruit and retain outstanding scholars and teachers with the new chairs was announced by Chancellor Nicholas S. Zeppos in August 2010.

"A university's greatness is reflected in the quality of its faculty," said Jeff Balser, M.D., Ph.D., vice chancellor for Health Affairs and dean of the School of Medicine. "You are the people who are having the impact that we hope to have around the world, and we want to recognize that."

The new chairs within the School of Medicine are:

- John W. Brock III, Monroe Carell Jr. Chair and surgeon-in-chief for the Monroe Carell Jr. Children's Hospital at Vanderbilt;
- Dai Chung, Janie Robinson and John Moore Lee Chair in Pediatrics and vice chair of the Department of Pediatric Surgery;
- **Roger Cone,** Joe C. Davis Chair in Biomedical Science and chair of the Department of Molecular Physiology and Biophysics;
- **Michael DeBaun,** J.C. Peterson, M.D., Chair in Pediatric Pulmonology and director of the Vanderbilt-Meharry Center for Excellence in Sickle Cell Disease;
- Jonathan L. Haines, Louise B. McGavock Chair and professor of Molecular Physiology and Biophysics and Professor of Human Genomics;
- **David G. Harrison,** Betty and Jack Bailey Chair in Cardiology and professor of Cardiovascular Medicine;
- L. Jackson Roberts II, William Stokes Chair in Experimental Therapeutics and professor of Pharmacology and Medicine;
- David Wasserman, Annie Mary Lyle Chair and professor of Molecular Physiology and Biophysics;
- Christopher V. Wright, Louise B. McGavock Chair and professor of Cell and Developmental Biology;
- Mary M. Zutter, Louise B. McGavock Chair and professor of Pathology. vm - KATHY WHITNEY

GETTING PERSONAL

Update on Vanderbilt's Personalized Medicine Initiative

RESEARCH EFFORTS AIDED BY DNA DATABANK

BY BILL SNYDER

In just four years, Vanderbilt University Medical Center's rapidly growing DNA databank, BioVU, has helped open the door to a new era of personalized medicine.

By July, BioVU will contain more than 125,000 unique genetic samples. A crucial element of its success is a robotic system, called "SmaRTStore," which retrieves samples quickly and precisely.

As an example, more than 16,000 BioVU samples are being pulled for a study of genetic variations associated with several major cancers.

"Within a matter of months, we went from almost no cancer cases from our original cross-sectional study to thousands of cases and controls from BioVU," said Dana Crawford, Ph.D., assistant professor of Molecular Physiology & Biophysics, who is leading the study. "And many of the samples represent African-Americans, which is a relatively understudied group in genetic studies."

"We've pulled over 3,500 samples for our genetics project on multiple sclerosis," added Jonathan Haines, Ph.D., director of the Vanderbilt Center for Human Genetics Research.



"The ability to rapidly identify and receive samples and data on those 3,500 samples in just a few months ... is amazing."

Not only does it save time and money, but "having such a resource ... gives us a tremendous advantage in getting grants," Haines said.

More than 30 research projects were using the databank as of April, said Dan Roden, M.D., assistant vice chancellor for Personalized Medicine and BioVU's principal investigator. Without SmaRTStore, "it would be inconceivable to think we could deliver samples in a timely way to any group, let alone many groups," he said.

In 2007, Vanderbilt began saving DNA extracted from blood samples of patients that otherwise would have been discarded. Both the genetic material and its matching electronic medical record are "de-identified," meaning that all personal information has been stripped away to guarantee patients' privacy.

In July 2010, the \$1 million SmaRTStore, manufactured by RTS Life Science of Manchester, England, was installed in the basement of Medical Center North. Funded by a federal grant, the robotic system can hold more than 400,000 frozen DNA samples and uses dual bar-code technology to retrieve them.

Today BioVU is one of the nation's most comprehensive collections of human DNA linked to searchable, electronic health information.

In addition to finding genetic links to disease, the databank is enabling Vanderbilt researchers to test whether including genetic information in patients' medical records can help their doctors choose drugs that are most likely to work and will have the fewest side effects.

Pharmacogenomics – how genetic variation affects drug

Doha Itani, M.D., resident in Pathology, left, and Cindy Vnencak-Jones, Ph.D., professor of Pathology, peer into the SmaRTStore "vault" where frozen DNA samples are stored.

response – is a key aspect of personalized medicine.

Ongoing, strategic investments by the University have made these developments possible. They have, in turn, attracted additional federal funding for such projects as Vanderbilt's participation in the national Pharmacogenomics Research Network, said Roden, who studies the pharmacogenomics of drugs used to treat abnormal heart rhythms.

"Overall," Crawford concluded, "because of BioVU and other resources ... Vanderbilt investigators such as me will be able to quickly make a meaningful impact on genetic studies of complex human diseases." VM

TEACH. PRAY. HEAL. ⊕

Sister Mary Diana Dreger, M.D., MD '01, has the best of many worlds.

8

WRITTEN BY **KATHY WHITNEY** PHOTOGRAPH BY **SUSAN URMY**

Tarascon Docket

BY THE TIME Diana Dreger was in jun-

ior high school, she knew she wanted to be a physician. Little did she know she would be 39 years old and a Dominican sister when she finally received her M.D. in 2001.

Dreger grew up on Long Island, the eldest of four children. Her parents, devout Catholics, stressed the importance of education, family prayer and church. If a question arose at the dinner table for which there was not a ready answer, the children were encouraged to find a book that had the answer and to share it with the rest of the family.

She jokes that she was leading a Dominican life before she knew what that was.

Accepted to Cornell University as a biology major, she became conflicted as to whether the medical field was really her call. Amidst what she calls a crisis, she left Cornell early in her junior year, questioning if the demands of being a physician would allow her to have a family, something she thought she wanted to do.

It turns out that there was an altogether different plan for her, and she delights in how it unfolded.

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After taking a year off from school, she enrolled in the State University of New York at Stony Brook as a biology major, and added a concentration in secondary education.

"I did it a little bit halfheartedly because I knew you could never really make money at teaching, and if you're going to be teaching, you need to love it," she says of her change in direction. "It allowed me to pursue something else without giving up the idea of medicine in the future. I fell in love with education. I enjoyed it and did a good job with it."

She earned a master's degree in mathematics and enjoyed spending her summers in study. After teaching for a few years, a serendipitous trip to Arlington, Va., brought her in contact with a group of Dominican sisters who were also studying there for the summer.

The Dominican order was founded nearly 800 years ago by St. Dominic and is grounded in three mottos: truth, to contemplate and to give to others the fruits of one's contemplation, and *laudare*, *benedicere*, *praedicare*, which means to praise, bless and preach. The sisters wear the traditional black and white habit and devote their lives to teaching. Dreger felt an immediate connection to them.

"I met the sisters in the summer of 1988 in what I thought were accidental circumstances, but God doesn't have any accidents in life, really," she says. "As soon as I met the Dominicans, I just knew that that was what the Lord was calling me to. I had never considered being a sister. I had never thought that was what the Lord would propose in my life."

These particular sisters were from the St. Cecilia Motherhouse

in Nashville, which was founded in 1860 to provide Catholic education for young women. This gave Dreger, a lifelong Yankee, cause for concern.

"I thought, well Lord, everything is perfect, but it can't be Nashville, not Nashville!" she recalls with a laugh. "I didn't have any particular bias against the South, but it was just so far from New York. I realized, though, it was too late to add that provision in."

She visited the Motherhouse, the sisters' residence, which sits atop a hill and overlooks downtown Nashville, in the fall and again in the spring and said she had no doubt it was a perfect fit. She joined the convent in 1989 and after her first year changed her name, as is customary, to Sister Mary Diana.

"My dad was excited for me, and my mom was really not happy. That's changed in her life now and she really loves the sisters," she says.

Her desire to practice medicine was replaced by a love of teaching. For the next seven years, she thoroughly enjoyed teaching biology, chemistry, anatomy and physiology and religion to the students at St. Cecilia Academy, where she was also head of the science department.

She took her final vows in 1996. One month later, she walked into the Mother Superior's office to ask a question and was shocked to hear her say, 'I am thinking about sending you to medical school.'

"I sat there with my mouth opened and realized it was not a joke," Dreger recalls. "She said to me, 'Think about it and pray about it and let me know what you think.'

"My initial thought was, 'Lord, this is very interesting because I have just committed my life in a way I thought I knew where it was going and you have now just handed me something that I thought I always wanted but never expected at this point."

A week later, Dreger met with John Lukens, M.D., then director of admissions for Vanderbilt University School of Medicine.

"I basically said, 'I'd like to go to medical school here at Vanderbilt, can you tell me what I need to do?" Dreger recalls. "He nicely explained that I really didn't have several necessary pieces to apply for medical school and that I had just missed the application deadline by a week."

Lukens directed Dreger to the undergraduate pre-med advisor who pointed out that she had no medical experience to know what she was getting into; she had not yet taken the MCAT admission exam; and she hadn't studied anything in 12 years.

"They weren't sure I could still study," she says.

She enrolled in a biochemistry class at Vanderbilt that happened to meet during her teaching free period. She got to know a physician who was helpful in giving her experience, and she started studying for the MCAT.

"All of those things just fell into place incredibly well. I got

:: alumni profile

lots of good experience and met lots of good people in the medical field who were supportive of my education," she says. "On the MCAT I scored a little better than average for the medical school class I entered with, and I got the best grade in the biochemistry class."

She submitted her application on May 14, 1997, as a late application.

"They gave me no promises," she says.

She had two interviews in June, and on July 17 she got her acceptance letter to start in August.

"On a human level it doesn't make sense that all of those things happened like they did. As I was watching this whole thing unfold, I was really fascinated by it, and I thought this is going to be great," she says.

Dreger easily assimilated into the VUSM class of 2001. She was inducted into Alpha Omega Alpha, the medical school honor society, and received the Healthcare Foundation of New Jersey Humanism in Medicine award at Class Day. The award is given to a graduating student and a faculty member who demonstrate compassion and empathy in the delivery of health care.

"Sister is very conscientious, which is part of what makes her a very good doctor. She is also loyal and has a real care and love for her patients, as she does for her friends," says Mother Ann Marie Karlovic, O.P., Prioress General. The Dominican sisters paid for Dreger's education, in part, so she could return to the Motherhouse and help care for some of the 270 sisters who live there. On a larger scale, it was felt Dreger could contribute to the Nashville community in a way that the sisters had not been able to, by providing health care to the underserved population.

"There is a real consciousness on the part of good physicians that they treat the whole person, not just the physical but the spiritual as well. I think this is what Sister really does bring to her practice," Karlovic says.

Dreger agrees that she brings a unique perspective to the practice of medicine.

"I was certainly much more experienced at 39 than I was at 18 in terms of human interaction that I learned through being a teacher and administrator. I could see that I was going to bring something to the medical field in a very different way than if I had gone through with my plan to enter medical school at the age of 20," she says.

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Dreger, who completed a three-year Internal Medicine residency at Vanderbilt, works three days a week at the Saint Thomas Family Health Center South Clinic and has done so since 2007.

On a typical Monday morning, the waiting room at the clinic is full. Jesus

Medina, a dapper, quiet man, patiently waits for his name to be called. After he is weighed and has his blood pressure taken, he is shown to an exam room at the end of the hall. He takes a seat and talks about his physician whom he is waiting to see.

"I think she is very smart and a very good doctor," he says, adding that he has been her patient for six months.

When Dreger enters the room, wearing a white coat over her habit, they greet each other cordially.

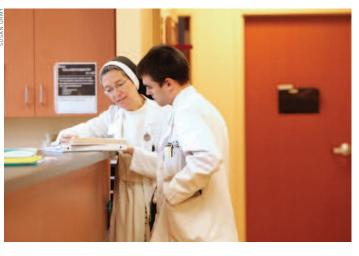
"Hello, Sister," he says, smiling.

Dreger extends her hand in a friendly shake, takes a seat next to him, and begins to review his chart with him – in Spanish.

"When I first got here, I knew no Spanish. They were willing to let me work with the staff as interpreters, translators," she says. "That worked nicely, but it became awfully obvious to me quickly that the history of the patient is so important and if you can't understand the patient or communicate, there is a big piece missing."

Always the eager student, Dreger enrolled in Spanish I and Spanish II classes at Aquinas College and also studied medical Spanish. At the end of her first year at the clinic, she started communicating with the patients on her own.

Tale of two vocations: Working in a south Nashville clinic allows Dreger, shown here, left, with third-year student, Dustin Hipp, and her patient, Jesus Medina, to combine her love of teaching with patient care.





"In terms of medical things we're talking about, I am fine, but if they want to tell me about their family vacation, I don't have the language for that," she says. "I was never very good at languages. I am a visual learner. The whole auditory part of languages is very challenging to me, but so far, it's worked well."

About 90 percent of the patients at the primary care clinic are uninsured and are seen on a sliding scale, meaning most of them pay \$20 for a visit. It is largely an immigrant population, representing more than 35 countries, the largest group being the Hispanic population.

"We take care of the usual things an internist sees like diabetes and high blood pressure and whatever else happens to come in. I have definitely seen things there that I heard about in medical school and residency but hadn't seen yet," she says.

She recalls that one day a young lady came in and told her she was depressed. She had been diagnosed with breast cancer a few years prior and had some depression at that time and was seen by a counselor at the clinic. She was asking Dreger to refer her to the counselor again. Dreger performed a medical evaluation first, but there wasn't anything remarkable in the history or her exam. She ordered some lab work and sent the patient to the counselor.

"The counselor, who is very astute, came back to me and said, 'Sister, she's not depressed. And besides, she's black and she used to be white.' And I said to her, 'Well, you just made the diagnosis.'"

The patient had adrenal failure, also known as Addison's disease, which, among other symptoms, causes hyperpigmentation. Dreger had never seen the patient nor had she seen a case of Addison's before.

"It's a pretty serious disease. We got her back in quickly and had some tests done and she is doing very nicely," she says.

One of her favorite parts of this job is that she gets to teach medical students who come to the clinic for their primary care rotation, a required component for fourthyear medical students at Vanderbilt.



Dreger, center, participates in Mass at the St. Cecilia Motherhouse at 6:15 each morning, the high point and center of the sisters' day.

Medical student Brian Cruz worked at the clinic in November 2010 and said he learned a lot about the importance of evidence-based medicine to guide treatment.

"This was especially important because so many of her patients were uninsured or underinsured, and many laboratory or imaging tests often represented a financial burden for them," he says.

"Sister exudes a sense of compassion, but also authority, and is someone her patients can confide in and trust that she will do the right thing for them."

When she is not at the clinic, Dreger participates in the daily activities at the Motherhouse, which include rising at 5 a.m. for prayers, Mass, chores, shared meals, an hour of recreation in the evening, followed by a period of silence for reflection and study.

She is the primary care physician for about 80 of the sisters, who range in age from 18 to 102. She holds clinic at the Motherhouse on Saturday mornings, but is "on call" 24 hours a day for acute illnesses and emergencies. One young sister tore her ACL while playing football on the front lawn of the Motherhouse on Thanksgiving while another older sister complained of chest pain in the middle of the night. "Occasionally, I say 'call 911.' There are situations when that call is necessary," Dreger says.

As the sisters age, they are cared for at the Motherhouse, and with very few exceptions, they die in the comfort of this beautiful, historic place they have called home their entire adult lives. Dreger considers it her distinct privilege to have a position at the bedside when a sister reaches the last days of her life.

"It's actually an incredible blessing and a piece of my training that none of my classmates, certainly not while at medical school or residency, had experienced like I had here," she says. "I have been with a number of sisters when they died. This is our home. For the sisters it's a really special time because we really see it as fulfillment of what life is about."

Dreger said she feels that her Vanderbilt education provided excellent preparation to care for both of her unique patient populations.

"I think the combination of my medical training at Vanderbilt and my personal training as a sister are very complementary in terms of being able to take care of the whole person. It's hard for me to imagine what situation I could be in that would be better than what I have because I really have the best of many worlds," she says. VM



Croonlighting

Medicine is housed in the left side of the brain, the seat of logic, language, science and math. Left-brain-dominant people tend to be more logical, rational, analytical and structured – sounds like your typical physician, right?

But many of Vanderbilt's physicians and medical students nurture the creative side of the brain, the right hemisphere and place of intuition, imagination, art and their most frequent destination, music.

"There are many aspects of creativity in medicine. We get boxed into this idea that we're all type A, left-brained people, but in medicine there is creativity to think about things in different ways, look at different angles and be creative in how you approach problems, and music is the same way," said Dan Stover, M.D., Internal Medicine chief resident and 2008 Vanderbilt University School of Medicine graduate.

For these moonlighting physicians and students, music is many things – an escape from the pressure, a way to relate to patients, and in Nashville especially, a connection to the community they serve.

"The music scene is part of the fabric of Nashville and extends to Vanderbilt as well," Stover said. "I can't count the number of times I have talked with a patient and realized we were at the same live show together or they wrote a hit song on the radio. Even the toughest, most gruff patient who doesn't want to open up will talk about music."

> WRITTEN BY LESLIE HILL Illustration by Joel Anderson and Andy gregg

Derived from the Leaning Cowboy Print from the Spirit of Nashville Collection. © 2011 Anderson Design Group, Inc. Used by permission.



MUSIC LOST AND FOUND

Dan Stover, M.D., grew up playing classical violin, but stopped in 10th grade to concentrate on rowing. At Vanderbilt, his fellow residents Jay Montgomery, M.D., and Matt Semler, M.D., had formed a band and Stover wanted to join, but they had already found a fiddle player, Ashely Tauriac, M.D. Knowing Nashville was a good place to pick up a new instrument, Stover went to Cotten Music Center in Hillsboro Village, bought a mandolin and taught himself to play in six months.

They formed a bluegrass band called

the Bourbon Family, named not for the Kentucky whiskey but for the French ruling family.

"The original name was the Bourbon Family Compact, which is this treaty that mitigated power across the European continent. We thought the reference to French history wouldn't go over as well, but Bourbon Family seems very Tennessee."

Semler is a prolific songwriter, and in January the group recorded 20 tracks in an east Nashville studio. The CD was released in June.

"We're not going to quit our day jobs



BEST PLACES TO HEAR LIVE MUSIC IN NASHVILLE

Suggestions from Dan Stover, M.D.

The Station Inn – "It's the place, period. I'm there probably once or twice a month." (402 12th Ave. S.)

Music City Roots – "Everyone from Sam Bush to John Oates on the same stage." (Loveless Café - 8400 Hwy. 100)

Mercy Lounge – "The best place for current indie and alternative music." (1 Cannery Row)

The Family Wash – "I like to go to the Tuesday night short sets to see up and comers." (2038 Greenwood Ave.)

Ryman Auditorium – "This is the best place for bigger shows. I've seen people play at the Ryman and elsewhere, and people bring their A game to play at the Ryman." (116 5th Ave. N.)

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anytime soon, but we wanted to document all the music that we have. We all want to change the face of medicine more than we want to make a hit record," Stover said.

Being a part of the Bourbon Family has let Stover reclaim a lost passion while concentrating on medicine.

"When I come home from work, a lot of time I'll take out my mandolin and just play. Sometimes I'll lose myself, and two hours later realize I really should make myself some dinner," he said. "Music is something I had lost in college and medical school but had loved so much, and now I've gotten it back in my life." VM

NE RAYN



Match Day serenade

At this year's Match Day, Chris Estopinal sat nervously, not like the rest of his fourthyear classmates who were waiting to open the envelope that would reveal their residency fate – he had already matched early at Vanderbilt. No, Estopinal was nervous because once his name was called, he would pick up his guitar and serenade the hundreds assembled in Light Hall plus everyone else watching the webcast.

Originally a friend asked him to play a song for her as she walked down to open her envelope, but when plans changed, Estopinal decided to play his own song.

The hardest part was picking the right tune - "I Can See Clearly Now."

"We wanted to choose something that was upbeat and fun, and also had to do with being able to see because I'm going into Ophthalmology. Plus, everybody knows that song," he said.

As soon as Estopinal and his friends Neal Carpenter and Stevie Griffin, who were backing him on guitar and mandolin, sang those first words, there was a cry of recognition from the audience and they were immediately clapping. Estopinal, bouncing to the beat, was clearly having a good time.

"Everybody really got into it and were clapping and singing along. I wasn't expecting that at all, so it was a lot of fun," he said. "It seemed like people really thought it was a fun addition to the day."

After an injury in high school, sports were out, so Estopinal taught himself to play the guitar. He continued performing casually through college and medical school, playing for open mic nights and weddings. Though many of his friends have turned music into a full-time career, Estopinal has decided to concentrate on medicine.

"I don't think I'll ever stop playing. Music is more than a hobby. It puts a lot of meaning in my life," he said. "But in the next few years, it will be more important and more meaningful learning to be an excellent ophthalmologist rather than really pouring everything I have into music." VM

Adam Wegner student, singer, juggler

Adam Wegner is one of those people who likes to be busy. Many would find medical school overwhelming enough, but on top of that Wegner, a third-year student, also found time to lead Immune Response (the VUSM men's a cappella group), sing with the Nashville Symphony Chorus (including leading its bass section) and serve as director of the Shade Tree Clinic, a volunteer clinic in east Nashville that provides free care and is run by Vanderbilt medical students and physicians.

But he has always been that busy – playing piano from fifth grade through college, singing in school ensembles, and playing soccer, even on the college level.

"I've just always been into a lot of activities," he said. "Singing especially is my release away from everything. It's therapeutic just to go and sing, so I make time for it. I enjoy the practice, and it's only a few hours a week, so it's pretty easy to fit in."

Wegner's high school music teacher got four boys together for an a cappella quartet, and that's when he realized how much he enjoyed singing, especially in a group.

"With choral singing, there's just something about being in big group coming together. It's more than the sum of its parts, and it's all about working with people and listening to people. You're trying to fit in, not be the star."

Wegner first came to Vanderbilt in 2001 to study neuroscience in the Interdisciplinary Graduate Program. While taking the medical school neuroanatomy class, he found out about Immune Response and joined the group. He also went to the Nashville Symphony's summer festival, realized that one of his professors, David Piston, Ph.D., was in the chorus and asked him how to get involved.

"On the weeks that we have concerts there is a lot of practice and dress rehearsal, and there have been times when that happens the week before an exam. But I've always done a ton of things, and it's good motivation to study early and be prepared." VM



You play the *what*?

The marimba. Gretchen Roth describes it as a giant xylophone. It's actually best described as a percussion instrument with bars of wood that are struck with mallets to produce sound.

In fifth grade, Roth, now a secondyear VUSM student, joined her school's band and chose to play percussion. The drums led to the xylophone, and then the instructor suggested the marimba. She started lessons and continued playing through high school.

Roth was also a member of the youth choir in her Iowa hometown, a group that toured internationally, and decided to pursue singing at college at the University of Miami. It wasn't until medical school that the marimba came calling again.

"After about a semester of anatomy, I decided I needed something else to do. So over Christmas break, I drove home and brought it back with me," she said.

This is actually a pretty big hassle.

"Luckily, it breaks down into pieces and actually fits into my car, but I can't move it on my own. I always have to get someone to help out."

But the mental break it provides is worth the effort.

"It's something totally different than medicine. It still requires work and effort and is something that I can work toward and get better at. For me, it's just a way to relax and a break and a way to do something besides learning anatomy."

Roth plays with the Vanderbilt Community Concert Band, a low-key group comprised of Vanderbilt students, faculty, staff and alumni, and she continues her singing with Biorhythms, VUSM's female a cappella group. Being able to play solos on the marimba or sing or play with a group gives her the best of both worlds.

"Playing marimba is a way to express what I want to express, and I'm in control. Being in an ensemble is about coming together and using the collective to make music," she said.

Roth recognizes how useful music can be to connect with patients and meet people in the community.

"The marimba is always a good conversation piece. People are like 'What is that?"" **vm**



Members of Soul Incision:

Bryan Brand Keyboard

Carol Byrd Vocals

Jeff Byrd Saxophone, guitar, vocals

> Robert Early **Trumpet, vocals**

Deb Kemp, R.N. Vocals

Ralph LaNeve, M.D. Guitar

C. Wright Pinson, MBA, M.D. Drums

Ed Shultz, M.D. Bass, vocals

Steve Smartt Trumpet, vocals

Norman Urmy Guitar

Visit Soul Incision on the web: www.soulincision.com



IT'S NEVER TOO LATE TO ROCK AND ROLL

Often called Vanderbilt's "house band," Soul Incision is made up of physicians, nurses and administrators.

This year marks 13 years that they have shed their white coats and ties to take to the stage and play the songs that are guaranteed to get people dancing: "Funky Music," "Brick House," "I Will Survive" and "Brown Eyed Girl."

"We've toured around the country, and I like to tell people we've cornered the market on surgical conventions," said Norman Urmy, vice president of Vanderbilt Health Services and the band's founder.

After a year of guitar lessons, Urmy's son had decided he had learned all there was to learn and offered Urmy his spot with the teacher.

"He said something to the effect of 'Dad, you spend way too much time working. I'm quitting guitar lessons, why don't you take my spot and do something fun?' I thought that was actually a pretty good idea. About three years into the lessons, my teacher challenged me to get in a band," Urmy recalled.

Word spread quickly as people heard about the band and suggested members. The band's first gig was the Hospital Administration Christmas party, with a set list of eight songs.

"We finished the eight songs and they asked us to play them again. I think that's when it really hit us that this is fun and people actually like us," Urmy said.

Thirteen years and two CDs later, Soul Incision has expanded its repertoire to 80-plus songs and has shared the stage with big names like Steve Cropper, Charlie Daniels, Vince Gill, Suzy Bogguss, Lorrie Morgan and Billy Dean. They have donated close to \$100,000 of CD proceeds to the Hospital Hospitality House.

"It works for us because we do it for fun," said Bryan Brand, vice president of Medical Center Business Development and keyboard player in the band. "Making it a priority to do something fun does help with balance. A lot of us are compulsive types who work a lot, so it is helpful to have this. And it says something about Vanderbilt culture because there are a lot of corporate cultures where leaders would be anxious about perception."

Soul Incision still has a few things on its bucket list – playing Chicago, New York and an international gig, and the band has no plans to slow down.

"If I can stand and speak, I'll keep doing this. It's better than paid therapy. It's medicine for the soul," said Deb Kemp, R.N., a physician liaison and vocalist. "It is such a privilege to be able to not just do this with people you love and have so much fun with, but to be able to represent the institution. We're proof it's never too late to rock 'n' roll." VM



THE MAJOR LESS TRAVELED

En route to medical school, second-year student Michael Spinner took the major less traveled, choosing to study music in college.

At 16, Spinner wanted to be a rock god and took up the electric guitar, until his teacher introduced him to classical finger-style guitar.

"Once I went to my first classical guitar concert, I was hooked," he said. "I loved how versatile it was, that you could play everything from the classical repertoire - Bach and other classical composers - but you could also play Brazilian jazz, and tango from Argentina."

At Emory University, Spinner decided to major in music, taking guitar lessons with faculty member Brian Luckett, studying music history and theory, and practicing 20 hours a week. But Spinner also knew he wanted to be a physician and did the pre-med curriculum. His inspiration for this combination was his mother, who died from breast cancer when he was 15.

"My mom was always really interested in music as well. She taught me piano and we really bonded over that," he said. "During my mom's battle with breast cancer I really gained a lot of respect for physicians, so I knew I wanted to do medicine coming into college. But I always had this passion for music and figured this was my opportunity to study what I really want to study," he said.

Being a music major means Spinner is sometimes learning things in medical school for the first time, but has no regrets about his decision.

"I did give some thought to pursuing music as a profession, but I think I just never wanted to have to look at it as work. I always preferred to have it as a hobby and as a respite from all of the science."

Spinner has reduced his practice time to five to 10 hours a week and takes lessons about once a month from classical guitarist Stanley Yates in Clarksville, Tenn. In May, he recorded his first studio CD on Music Row.

"Involvement in the arts is something I wouldn't trade for anything in the world. Even now, as busy as I am, I have to make time to practice and get gigs in coffee shops nearby. I always want it to be part of my life." VM

Immune Response

HOW A CLASS SKIT LED TO A LONGSTANDING MUSICAL TRADITION

At the 1985 Cadaver Ball, a few guys sang and snapped their way through a version of Billy Joel's "For the Longest Time" - the lyrics changed to poke fun at their disillusionment with anatomy class. The group caused such a sensation that a permanent a cappella troupe, called Immune Response, was formed and still exists today as the official men's singing group at Vanderbilt University School of Medicine.

Founding member, Chris Hill, M.D., MD '88, now a urologist at Urology Associates in Nashville, said Immune Response quickly became the dean's "favorite weapon," and the group was trotted out to sing at fundraising events and alumni luncheons. In red vests and bow ties, the men performed classic barbershop arrangements, love songs and pop hits.

'Everyone appreciated that we were medical students first and singers second. I think they were pleasantly entertained and genuinely surprised we weren't terrible," said co-founding member John Wadlington, M.D., MD '88, now an anesthesiologist at Massachusetts General Hospital.

After the founding members of Immune Response graduated, the second-generation members wanted to give something back to Dean (John) Chapman, their strongest supporter. George Sawaya, M.D., MD '90, wrote the lyrics and Gregg Perry, M.D., MD '91, composed music for a class song, "Vanderbilt Remains With Me."

"We always wanted it to be specifically a medical school song," Sawaya said. "I figured that as long as Immune Response was active the song would be propagated."

The song and the group live on today. Immune Response has about 12 members and has performed the song with Biorhythms, the female a cappella group, at Class Day.

Wadlington admits he is surprised the group still exists.

"I'm glad to know the students today can enjoy it as much as we did," he said. VM

Perfect Harmony

Recording artists share time, talent and treasure with Vanderbilt

In 1950, a WSM radio announcer nicknamed Nashville "Music City, USA," and the music industry has called the city home ever since. As the artists' roots grow deeper in Nashville, many choose to support Vanderbilt University Medical Center, the "community hospital" that shares the same soil.

"In Nashville, artists don't just show up on the red carpet to pose for photos with little or no engagement with the actual charity. I see artists who come to the Medical Center when it's hard to see patients who are very sick. They want to do something beyond music and give back to the people who have given them so much. Many of them really find their mission through their charity work, and we're blessed that so many of them have chosen Vanderbilt," said Rondal Richardson, entertainment industry relations manager for VUMC.

Richardson's position, created last year, is unique to Vanderbilt, but one that makes perfect sense in Music City. Drawing on 20 years of experience in entertainment marketing and management, he is a liaison between the Medical Center and the entertainment industry, communicating the strength of its health care services and building philanthropic interests and involvement. From his time in the industry, Richardson knows how grueling life on the road can be and how hard it is for a musician to say no to a worthy cause.

"I know what a precious gift it is for the artists to give of their time and resources. So when I'm asking someone to do a project with Vanderbilt, I think about that, and I work to make the experience as meaningful as possible for everyone involved."

Richardson said one of the greatest examples of philanthropy is from Rascal Flatts, who have donated more than \$3 million to the Monroe Carell Jr. Children's Hospital at Vanderbilt and are frequent visitors and willing huggers.

"Whether the cameras are on or off, they are so generous in sharing their love and compassion for the children and families. They want to get their arms around everyone, even the most critically ill," Richardson said.

In September, Children's Hospital unveiled the Rascal Flatts Surgery Center, which houses existing surgical programs and will soon hold a state-of-the-art interventional radiology suite.

"It's amazing what they do here every day. They're able to take the most serious situations and turn them into a positive," said Joe Don Rooney, the band's vocalist and lead guitarist.

Members of Rascal Flatts at the naming ceremony for the pediatric surgery center.



"And that's why we knew very quickly that we wanted to be involved with the Children's Hospital. It is a magical place."

Since 2005, the band has held fundraising concerts, hosted exclusive parties for patients and families, filmed advocacy messages, visited hospital rooms, posed for countless photos and distributed endless hugs.

"Seeing those kids and being face to face with the people that you directly impact makes all the early mornings and late flights and touring and schedule that we have that is so demanding sometimes, it makes it all worthwhile," said Rascal Flatts bassist Jay DeMarcus.

"This is the biggest accomplishment of our entire personal or professional career, being a part of this hospital," added lead singer Gary LeVox.

Rascal Flatts were introduced to the Children's Hospital through its original "Pied Piper" – Kix Brooks, part of former country duo Brooks & Dunn, who sits on the Children's Hospital board.

"He has been a longtime advocate for Children's Hospital and really connects with the kids. He has told all of his peers about what an amazing place it is and everyone followed him in," Richardson said.

One of Brooks' early followers was Dierks Bentley, whose Miles and Music For Kids celebrity motorcycle ride and concert is one of Children's Hospital's more visible entertainment events. Now being duplicated in other cities, it has attracted 30,000 fans and raised more than \$1.5 million for Children's Miracle Network Hospitals.

Many more performers have graced the Children's Hospital performance stage in the past few years, including Taylor Swift, Wynonna Judd, Easton Corbin, Chris Young, Phil Vassar, The Band Perry, Melinda Doolittle, Jars of Clay, Kellie Pickler, Miley Cyrus and Alison Krauss.

"Much is given, much is expected, and there's the sense that this a beautiful family that doesn't exist in any other form of entertainment," Richardson said. VM

- LESLIE HILL



'Off the Pain' and Back to Singing

VOCAL SURGERY PUTS COUNTRY ROCKER GARY ALLAN ON THE ROAD AGAIN

> WRITTEN BY CRAIG BOERNER PHOTOGRAPH BY JOE HOWELL





Country rocker Gary Allan

still belts out his hit song "Get Off On The Pain" when performing in music venues, big and small – just not as the opener.

Allan spent a good part of last year starting his shows with the powerful screamer, but eventually lost his high-end falsetto due to a polyp on his vocal cord, prompting cancellation of his remaining tour shows and a visit to Vanderbilt's renowned Voice Center.

"We opened our show with that song, and I think it was my consistently going out there every night, without warming up much, that led to the polyp," he said. He had been on The Last Rodeo tour with Brooks & Dunn, which was cancelled and postponed due to Ronnie Dunn's physician-ordered vocal rest. Allan and his manager, John Lytle, took it as a sign for him to seek treatment for his vocal issues as well.

"He knew something was limiting his vocal range, but he didn't know what it was," Lytle said.

Knowing he'd need three months to rest his voice after the procedure, Lytle canceled a New Year's Eve gig in Las Vegas, and Allan made an appointment at the Vanderbilt Voice Center in November 2010.

Wall of Fame

The Voice Center staff has treated preachers, radio personalities, auctioneers, businessmen and a long list of celebrities including Johnny Cash, Minnie Pearl, Kathy Mattea, Patty Loveless, Emmylou Harris, Jack White, Trisha Yearwood, Martina McBride, Ronnie Dunn, Pam Tillis, Wynonna Judd and Gretchen Wilson.

Allan had been there for vocal checkups and to accompany his father, Harley Herzberg, when he was battling cancer.

"I think every musician who lives in town knows about the Voice Center," Allan said. "It is a perfect marriage for Music City to have a Voice Clinic. People fly in from all over the world and I think a lot of it is because of the recognition they get in Nashville; it is a fantastic marriage."

Gold and platinum records line the familiar hallways of the Voice Center – a sign of appreciation from Music City's singers for their successful treatment. As Allan entered the waiting room, a Johnny Cash record was on the wall across the room.



"I think that makes musicians feel like they are in the right place," Allan said. "It's comforting to me to look around and see people I know on the walls. To me, it says that they really know what they are doing because this is all they do."

Founded in 1987 and consistently ranked among the best by *U.S. News and World Report*, Vanderbilt's Department of Otolaryngology, which houses the Voice Center, is placed among the top 10 in NIH funding, with more than \$10 million in grants. The department's "founding four" physicians, executive director Robert Ossoff, M.D., James Duncavage, M.D., James Netterville, M.D., and David Zealear, M.D., are still active fulltime faculty members.

Larry Gatlin's 1991 vocal operation provided a spark to the Vanderbilt Voice Center when Gatlin served as the Master of Ceremonies for the grand opening in March 1992 and credited Ossoff and the Voice Center with saving his career.

Gatlin went on to establish the 'Gatlin Fund,' named in honor of the Gatlin Brothers, to assist musicians who require treatment but are uninsured or unable to pay for medical care.

Rising through the Ranks

Ossoff's 1994-95 trainee, Gaelyn Garrett, M.D., is now medical director of the Center and has begun building her own legacy.

Willie Nelson wrote the song "Superman" about the time Garrett took him off a tour to rest his voice:

Well I blew my throat and I blew my tour I wound up sippin on soup d'jour I wasn't Superman I wasn't Superman Try to do more than I can I wasn't Superman

Well the doctor said son it's a cryin shame But you ain't Clark Kent and I ain't Lois Lane

Garrett sees just about everything under the sun from Nashville's singing

In Good Company

The Vanderbilt Voice Center was established in 1991. One of the first patients was Johnny Cash, who was a longtime supporter of the Voice Center. Trisha Yearwood, Emmylou Harris and Wynonna Judd are among the artists who have been treated here.



population, which encompasses not only Music Row but also Vanderbilt University's Blair School of Music, the Belmont University School of Music and the Fisk Jubilee Singers, an African-American a cappella ensemble consisting of students at Fisk University.

"Singers have everything from a little swelling of the vibrating edge to nodules to polyps to cysts," she said.

Allan had a vascular polyp, which is a lesion on the vocal cord or vocal fold.

"It is not a tumor," Garrett said. "It is basically something that arises due to trauma to the surface of the vocal cord or vocal fold. What we think happens with the vascular polyps, which is what Gary had, is you get these little recurrent bleeds in the vocal cord and as it starts healing, it forms a polyp."

As part of their treatment, patients see a speaking or singing therapist at the Voice Center in order to change the behaviors that caused the problem.

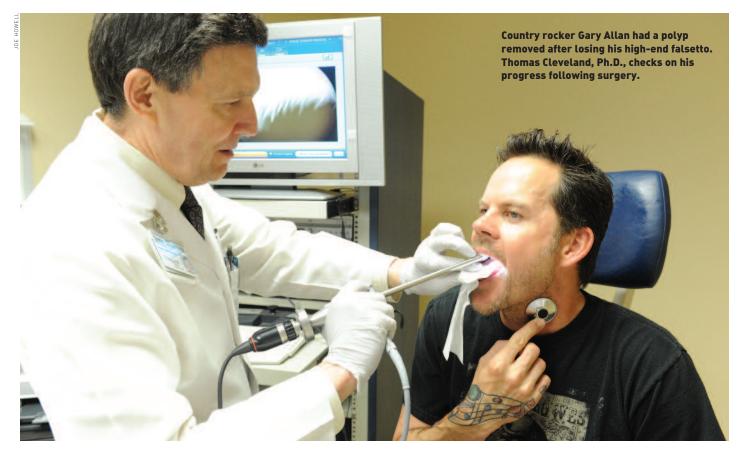
"We either do that in an attempt to avoid surgery or we do it in an attempt to get them in the mindset for the rehabilitation after surgery. So, for him, we knew that he was probably going to need to go ahead and have the surgery and that most of his therapy would be post-op. So we look at that more of a rehabilitation," Garrett said.

Allan's diseased tissue was removed through a technique known as microflap, which uses a microscope to look at the actual vocal cord and the polyp.

"His polyp was probably 2 mm - 3 mm and we were trying to take out the diseased tissue, most of which was underneath the surface, and leave enough of the



Willie Nelson wrote a song about the time Gaelyn Garrett, M.D., took him off a tour to rest his voice.



surface tissue intact so that they close on top of each other," Garrett said.

"It is like taking a pea out of a pod except you open it up and then close it back. It is gentle dissection."

Garrett said she delivers the same amount of care to every patient, whether it is a singer or a teacher or a call center employee, but singers in some cases may have had a pre-existing lesion that actually helped create what is known as their 'signature sound,' so it is even more important to have a baseline examination to view the vocal cords before there is a problem.

"When the labels sign a new artist, they will often send them to us before they have problems. They will get an initial voice evaluation to make sure they are not doing anything damaging to their voice," Garrett said.

"It also creates a baseline exam so we know what their vocal cords look like and



My voice is my instrument; it's like being a guitar player and somebody taking all of the guitars in the world away from you.

– Gary Allan

if they do end up developing a problem down the road we will be able to say what is new and what is not. In an ideal world it would be great if every new singer came to us and got this first evaluation so that we knew where we were starting."

Garrett said one important uphill battle for a laryngologist is to change the mindset of employers, in particular, who don't view having a voice disorder as being 'sick.'

"I wish that, generally, people recognized the handicap you have when you have a voice disorder, whether it is acute or chronic," Garrett said. "If you were a football player, and you had an ACL tear to your knee, you are going to be limping and obviously can't practice."

Garrett says that new singers are singing more than ever with a hefty booking of radio shows and meet-and-greets in addition to their tour shows.

"Their speaking voice use has gone way up and their managers are frequently more focused on doing shows and radio interviews, and they are not paying attention to the fact that they are killing their voices because of all their speaking responsibilities," she said.

"To be fair to the managers, I have seen a nice transition through the years where the management actually is taking a more proactive role in the musicians' voice health, whereas before it was up to us to tell them they shouldn't be singing a two-and-a-half hour set without a break. A lot of these young artists want to go, go, go. They think, 'This is my chance. I can't not go out.' They have so many people depending on them."

On the Road Again

Garrett is wearing her usual light blue scrubs and white doctor's coat on this typical clinic day. She has seen Gary Allan a couple of times since his surgery in late November, and he seems to be doing well, back on tour and playing shows.

Allan said the surgical procedure was relatively painless and the last thing he remembers was an anesthesiologist putting a tube in his mouth.

"I think the last thing I said as I was passing out, I laughed and said 'Just don't break my teeth,' because I saw the great big pipe they were going to shove down my throat," he said.

"It was painless, it was as good of an experience as it could have been. I remember after the surgery Dr. Garrett said, 'Just don't hurt yourself thinking that you are healed.""

Garrett prescribed one week of vocal rest that had Allan communicating with his three daughters via a dry erase board.

"It is hard to do with kids," he said. "I think they got to the point that if it really wasn't worth talking about they wouldn't say anything, because they knew I was going to have to try to write it out."

The first show back after the surgery was Valentine's Day at the San Antonio Stock Show and Rodeo, setting off a successful 15-city run of shows that ended in mid-April. Allan will typically play about 100 shows in any calendar year.

"There was all of the 'what ifs' in my

head, because it makes you wonder," Allan said. "But I think I had known so many people who had vocal surgery that it is almost par for the course. If you do what I do, you eventually have to have something done to your throat.

"My voice is my instrument; it's like being a guitar player and somebody taking all of the guitars in the world away from you. I think hearing is the last thing I would want to lose, second to last is my voice because hearing is how I interact with singing, so I think my life would be very different without those things."

In time, he was healed.

"I've got it all back, basically," Allan said. "I carved out three months of my schedule and just took it off, and tried to make sure my first show back wasn't an hour and a half, it was an hour."

Vocal therapist Tom Cleveland, Ph.D., recently did a stroboscopy on Allan. He grasped Allan's tongue with a gauze pad and placed the scope in his mouth. Allan's vocal cords showed up on the monitor as he made the "E" sound. After a minute or so Cleveland had seen what he wanted to see.

A couple of minutes passed and Garrett reviewed the video of Allan's vocal cords.

"Everything looks great," she said, obviously pleased with what is on the monitor. "They are moving very well."

Allan is now good to go for his summer shows and he can still sing "Get Off On The Pain."

The trick, he says, is to place it a little farther down in the set list. $\mathbf{V}\mathbf{M}$

WEB LINK

For an inside look at the renowned Vanderbilt Voice Center, please visit www.mc.vanderbilt.edu/vanderbiltmedicine.

Being Gary Allan

Gary Allan, who started playing bars and honky tonks with his father, Harley Herzberg, at age 12, says he is "definitely living my dream."

A Huntington Beach, Calif., native, he grew up in the California country music scene, listening to Merle Haggard and George Jones. He says country music was popular in California in the '80s due to movies like "Urban Cowboy."

"I played with my dad from age 12-17. I was offered my first record contract when I was 15 but he wouldn't co-sign it. That's when I quit playing with my dad for awhile, back when I was a little kid, I was like, 'What are you doing?'

"He didn't think I was ready as a musician. He said I needed to play for the people who love me, the people who hate me, and the people who could care less. And then I'll start playing for myself."

Allan released his debut album, "Used Heart for Sale," in 1996 and commuted to Nashville for the first decade of his career before moving to town about six years ago.

"I thought I was ready when I was 15, obviously, but I don't think I really learned how to sing until I was 23," Allan said.

"But when you play in a bar night after night after night you stop caring about everybody else and you just start doing songs the way you want to do them. And then that becomes a style and you don't even have to think about it anymore. I think I knew I was ready when I stopped having to think about how I sing."

- CRAIG BOERNER

Writer's Block

Removing songwriter's benign brain tumor unlocks lyrics

WRITTEN BY **KATHY WHITNEY** Photograph by **patricia o'driscoll**



very songwriter has his or her own process of writing. Beth Nielsen Chapman, for example, almost always starts with the melody. Then, she discovers the lyrics in what she describes as a surreal, intuitive way.

"I start with a sound, and I follow the sound," she explained. "I use my voice as a divining rod. I'll play some chords and I am just poking around and accidentally bump into notes and say, 'Oh, I like that.' I allow it to reveal itself to me. That's why I feel like it's so close to a spiritual experience, really."

This process worked well for the better part of the last 25 years as she wrote hits for Willie Nelson, Tanya Tucker and the song "This Kiss" for Faith Hill, which garnered a Grammy nomination and was ASCAP's 1999 Song of The Year.

So it appeared odd when in April 2009 she began to experience trouble getting the lyrics out of her head and onto paper as she was working on her new CD, "Back To Love." It wasn't a pressing problem, more like a shadow that descended over her creativity, stifling the once easy transition of emotion into language. At the same time, she was experiencing a loud, rumbling in her ears.

"It sounded like there was an airplane in my head," she said. "I was very concerned because I couldn't hear tones or notes."

On her physician's advice, she came to Vanderbilt's Emergency Department for an MRI.

"The doctors came around the corner, young neurology students, with their clipboards and told me, 'The good news is nothing seems to be wrong with your ears. However, there is a mass on your left frontal lobe and you're going to need to see a neurosurgeon."

Chapman, who had lost her husband to cancer in 1993 and was diagnosed with breast cancer in 2000, thought to herself, "This cannot be happening."

Chapman met with Reid Thompson, M.D., William F. Meacham Professor of Neurological Surgery, right away. It turned out that the rumbling in her ears, attributed to an undiagnosed condition she was born with, had nothing to do with the fast-growing benign tumor on her brain.

"I was so fortunate to have the warning bells go off," Chapman said.

Thompson reviewed her brain scans and explained to her that the tumor had caused some swelling around the part of the brain that is an important area for language.

"The frontal lobe is important for getting words out. When we started talking about it, Beth said, 'Oh, my gosh. That may explain why I've not been able to get emotions into words and I can't write anymore," he recalled.

Thompson, a longtime fan of Chapman's music, removed the tumor in a four-hour operation. He couldn't believe what he witnessed in the intensive care unit as she regained consciousness.

"Literally, in the ICU she said, 'Give me a pen and paper,' and started writing and it all started flowing out. One of the songs on the album she had been working on is called "How We



"It sounded like there was an airplane in my head. I was very concerned because I couldn't hear tones or notes."

Love." It just blows me away. It's the most beautiful song I've ever heard."

Chapman was equally amazed. "The wonderful moment for me was that I woke up and I had spent those weeks before trying to finish this song, "Even As It All Goes By." I was coming out of anesthesia and I just remember the first thing coming into my consciousness was the third verse to my song. It was like these words that were floating over the clouds. I tried to write it down. It is a very complex little verse."

"As fleeting as the first light on a window sill Reaching through the darkest night, it can never be still Like the earth that spins, where it ends it begins"

"This whole song is about trusting that creative connection that we have and knowing it is always going to be there. When artists go through periods of time when they are not creative, they feel great frustration and agony sometimes. I go through times when I'm more creative and less creative, but I've never gone through a time when I am not creative at all."

Once she was fully recovered, she performed the songs from her new CD at Bluebird on the Mountain, a songwriter's night at the Dyer Observatory. Thompson and his wife went to hear her. Chapman's husband, Brentwood psychologist and photographer Bob Sherman, spotted them in the audience and went up on stage to let Chapman know they were there. She told her story to the audience and dedicated "How We Love" to Thompson.

"I was just in tears. She's a very amazing person," Thompson said.

In June Chapman performed at the Cancer Survivorship Conference and Celebration sponsored by the Vanderbilt-Ingram Cancer Center. This summer also brings the release of a CD of yoga chants she co-wrote and produced with Kirby Shelstad for Deepak Chopra Yoga and an astronomy project for children called The Mighty Sky, with Rocky Alvey, superintendent of the Dyer Observatory. Chapman is currently working on a boxed set of her songs, slated for a 2012 release.

With no foreseeable roadblocks ahead, even she doesn't know where her creative spirit will take her next.

"I like to dabble in all sorts of things," she said. "I have had such an amazing, fortunate career." VM

WEB LINK Watch a video of Beth Nielsen Chapman performing at the Vanderbilt-Ingram Cancer Center Survivor's Luncheon at www.mc.vanderbilt.edu/vanderbiltmedicine



Music's Healing Power

On any given day, Jenny Plume can be seen pushing her instrument-laden, two-tiered cart through the hallways of the Monroe Carell Jr. Children's Hospital at Vanderbilt. Her arrival onto patient floors is a welcome sight to staff and parents alike.

Plume's instruments often offer a remedy for what is ailing a patient. Her prescription for healing is music to the ears – literally.

Studies have shown that using music in medical settings can help lower blood pressure, reduce stress in patients and assist with pain management.

But Plume, a music therapist, doesn't need to refer to studies and skim through pages of research findings to know the impact that music has on patients. She experiences it every day.

"Music is therapeutic," said Plume. "There is a science to what we do. There is a reason we do every single thing and there is a pattern to it all.

"We might look like we are playing," she said laughing, "But, we know why we are playing, and it all has a purpose."

> WRITTEN BY JESSICA PASLEY ILLUSTRATION BY ADAM NIKLEWICZ

Music Therapy

According to the American Music Therapy Association (AMTA) music therapy is a clinical and evidence-based use of music interventions. It is used to alleviate pain, elevate mood and counteract depression as well as apprehension and fear. It promotes movement and wellness. It is a way to express feelings, enhance memory, improve communication and calm or relax a patient.

Plume, MT-BC, joined Vanderbilt in 2007 when music therapy was integrated into the overall treatment plan for pediatric patients. The therapy is used for patients 6 months and older to help them cope with their hospitalization by helping them express their fears, distract them during procedures, teach them a new skill as well as socialize with others in a small group setting.

"Music, whether it is at a time of sorrow, fear or happiness, is a form of support," said Plume. "I am not introducing music to people. I'm bringing it into their room to say – this is here for you and we're going to make this work however you need it to support you through this journey."

The Music Therapy program at Children's Hospital is supported by the Julian T. Fouce Fund. Tom and Maria Fouce started the fund in memory of their son, Julian, a great lover of music, who passed away in 2005. The program is the first of its kind at Vanderbilt. Other projects for patients include Music Days, a weekly interactive music group, and Band in a Bag, which brings music to the child if a music therapist or volunteer isn't available.

It Helps the Medicine Go Down

While some patients jump at the opportunity to participate in music therapy, there are others who take a little longer to warm up to the idea.

Since starting at Vanderbilt, Plume would check in on patient Chris Weber during her normal rounds at the hospital. Weber, who was diagnosed with cystic fibrosis at 3 months, would have two-to three-week hospital stays during his treatments. For the longest time, Weber seemed content watching TV, playing on the computer and listening to music.

One day Weber, 15 at the time, was intrigued by Plume's activities and invited her into his room. Now three years later, Weber has written more than 10 songs and learned to play the guitar. He has aspirations of studying music in college.

"He is definitely someone I look at and know that music therapy made a difference in his life," said Plume. "He now has a love and interest for something that he did not have before. If I can provide one patient with self-esteem, confidence and focus ... with direction, a healthy passion and drive, then I feel really, really good about that."

Weber, 18, knows his interaction with Plume made an impact on his life.

"When I am writing songs, it makes me feel special," he said. "I feel like I can accomplish things in life. I am not just sitting around, bored and down and out.

"I am doing something that makes me happy and takes my mind off of being sick. I don't know, I guess it really lets me be free and helps me let all the stress out too."

One of his songs, "Don't Give Up," chronicles his journey with cystic fibrosis,

an inherited disease that causes thick, sticky mucus to build up in the lungs and digestive tract. Another of his creations,

"That's Who I Am," was recorded by wellknown artist Vince Gill. It is part of a CD compilation that will be used to promote the music therapy program.

Amy McLaurin and her daughter, 4year-old Ansley, enjoy all aspects of the music therapy program.

McLaurin said the program was a source of motivation during her daughter's treatments for pleuropulmonary blastoma, a primary lung tumor.

"It was definitely beneficial for all of us," said McLaurin of the music interventions. "Music has been so healing for her. It was the one thing that she would never turn down and served as a positive aspect of her treatment.

"I think music is an opportunity for another level of healing. It provides an escape and is great for the parents too. It is uplifting to see your child happy and enthusiastic about something. It gives us an emotional boost, too.

"For Ansley it planted a seed and gave her a whole new awareness of something she absolutely loved to do. It has not only been healing for her at the hospital, it has carried over at home as well."

If Plume could have her way, music



Music therapist Jenny Plume engages Zander Matthew Paige in an impromptu jam session.

would be included in every aspect of a patient's hospitalization.

"If we could have music coming out of the walls everywhere, then healing power will occur," she said, quickly adding, "of course in conjunction with all the medicine!"

Musicians On Call

Vanderbilt has taken note of the importance music plays in a health care setting. Vanderbilt University Medical Center utilizes music in various ways to help patients, families, visitors and staff. In 2007, Musicians on Call was introduced to Vanderbilt and its affiliated facilities. It provides in-room performances by local entertainers.

Each week performers will spend three hours going room-to-room singing to patients and their families. To date, more than 100 volunteer musicians have performed for more than 40,000 people at the six locations that include VUMC, Children's Hospital, Stallworth Rehabilitation Hospital, the VA Tennessee Valley Healthcare Systems in Nashville and Murfreesboro, and Bordeaux Hospital, a skilled nursing facility.

Musicians on Call started in 1999 in New York. It has since expanded to Philadelphia, Miami, Washington D.C. and Los Angeles.

"This program has received really great reaction," said Katy Brown, program director of Musicians on Call in Nashville. "Not only do we find that nurses schedule around our songwriters' appearances on the floor, the patients' responses are incredible, and the musicians say they get more out of it than the patients.

"They love sharing their gifts and having the opportunity to brighten someone's day."

Dylan Altman, 39, is a volunteer musician for the program. He was recruited by a fellow singer/songwriter who thought



Altman could use a little pick-me-up.

"I was in a dark place and being involved in Musicians on Call really gave me perspective. I fell in love with the program. It's a great concept. I always loved music's healing power, but being able to provide that to someone else..."

Altman, who wrote the No. 1 hit "Watch the Wind Blow By," recorded by Tim McGraw, performs three times a month through Musicians on Call. He said his performances can be likened to a patient receiving a bouquet of flowers, balloons or a stuffed animal.

"It's that unexpected gift or treat," he said. "It's rewarding for me and my listeners. It's nice to be told that a patient smiled for the first time in a long time because of something I did.

"I keep coming back because it makes me feel good. Even if I am tired, I look forward to coming to perform because I'm giving to someone else. And whether I am on a stage, at a writer's night, part of a band or playing at the hospital – I give it my all."

Altman, who specializes in old rhythm and blues and gospel, is accompanied by a volunteer who asks each patient if they would be interested in hearing a song.

During a recent visit to the ninth floor of Vanderbilt University Hospital, patient Robert Ricco Sr. was distractedly pushing roast beef and peas around on his dinner plate.

A guitar-strapped Altman entered his room and Ricco's disposition changed.

As he sang "Soothe Me" by Sam Cooke, Ricco settled into his chair, leaned his head back and removed his glasses. With a broad smile, he swayed to the music while tapping his hand to the beat.

As Altman neared the end of his song, Ricco was humming along and raised his arms above his head, now lost in the moment of the music.

"This is great," Ricco said. "His playing made me feel special. I want to hear more. Can I pay you for more songs?"

"Your smile is payment enough sir," replied Altman with a big grin. "Thank you." The group moved on to the next patient room and the music once again began.

According to Leslie Faerstein, Ed.D., LCSW, executive director of Musicians on Call, the impact musicians have on patients, families and staff at health care facilities is remarkable.

"It is amazing how the energy shifts in a room," said Faerstein. "Music is a really powerful tool. When the musician begins, people really respond. There is a physiological reaction to it.

"When I see the profound effect that music has on people, every time I see the program in action, it is striking to me how important our work is."

Musicians on Call also offers a CD 'pharmacy' that is tailored to a specific health care facility. Each library is stocked with 200 CDs. Patients are able to check out a CD as well as a CD player to use at their bedside. There are more than 350 such libraries throughout the United States.

The Benefits of the Beat

Faerstein cites findings from a 1983 study by Lucanne Magill Bailey on the *Effects of Live Music vs. Tape-Recorded Music on Hospitalized Cancer Patients*, which showed a significant impact on emotional and physical changes in patients who heard live music.

"There have been many studies performed to show that music can help to manage stress, reduce pain, enhance memory in Alzheimer's patients, and express what people are feeling who can't otherwise access their feelings," said Faerstein. "We saw in the movie "The King's Speech" how music helps with stuttering."

Vanderbilt patient Michelle Allison used music in her post-operative regime to meet her breathing requirements.

"They wanted me to take deep breaths post surgery, and I have been playing my music and singing along to work my way up to taking the deep breaths," she said. "And it worked! It was much more fun than sucking on that blow thing (incentive spirometer)."

Faerstein agreed that the incorporation of music in all levels of treatment in a medical setting is most useful.

"We all know how music and making our own playlists helps us to express how we're feeling or to distract us from our emotional state," she said. "It does the same with hospitalized patients. We know how music can be transformative." VM



PROBING MUSIC AND THE MIND

What does music as medicine mean?

For centuries, philosophers, physicians and politicians have waxed poetically about music's healing power.

Oliver Sacks, M.D., author of "Awakenings," wrote that "the power of music to integrate and cure ... is quite fundamental. It is the profoundest nonchemical medication." While many agree with his assessment, one of the biggest questions remains: how do we know?

According to Elisabeth Dykens, Ph.D., Annette Schaffer Eskind Chair and director of the Vanderbilt Kennedy Center – we don't, yet.

"Until recently there was very little data on the healing power of music," said Dykens, professor of Psychology and Human Development, Pediatrics and Psychiatry at Vanderbilt. "There are so many gaps in our information, but there is growing recognition that there is a need to understand this better through research.

"Right now, we all seem to have a sense of how music as an intervention works, but we need to document how it changes the way the brain functions, how it changes our stress and hormonal profiles, how it creates happier people."

Beyond emotions, music can have a profound impact on even the most medically fragile, leading to shorter periods of time being intubated, less pain medication and a dampening of stress hormones, for example. Dykens is interested in understanding the neuroscience and cognition of music in hopes of filling the gaps of what music as medicine means.

Dykens' research has primarily focused on individuals with Williams syndrome, a genetic disorder than can lead to development problems. People with Williams syndrome often show an unusual attraction to music. In her studies, she found that music reduces anxiety levels and has a calming effect.

For the past six years, she recruited a bevy of research participants through the ACM Lifting Lives Music Camp, a weeklong residential camp for people with Williams syndrome and other developmental disabilities. Campers participate in songwriting workshops, recording sessions and a live performance at the Grand Ole Opry. During their stay, campers are also involved in a host of clinical and neuroimaging research to help investigators understand the unusual auditory processing and love for music that is characteristic of Williams syndrome

Dykens recently co-wrote "Musical Interests and Abilities in Individuals with Developmental Disabilities," for the International Reviews of Research in Developmental Disabilities. Along with graduate student Miriam Lense, the pair reviews all the literature on music as therapy or musical processing in individuals with different types of developmental disabilities.

She also has launched the Music and Mind Initiative, a



collaboration of musicians, scientists, clinicians, students and therapists with a growing interest in music as both science and medicine.

"The Vanderbilt Kennedy Center facilitates discoveries and best practices that make positive differences in the lives of persons with developmental disabilities and their families," said Dykens. "We support and apply scientific research to bring better services and training to the community and we have the capacity to grow a critical mass of creative researchers to explore multiple aspects of music and the mind.

"We can collect data that will inform all of us how to use music in targeted therapies, in targeted populations." Dykens has pondered how it is that a person with dementia cannot recognize a family member, but can sit down and play the piano; how is it that a child with autism spectrum disorder has trouble learning math facts, but when they are sung to, the child learns?

"We don't know anything really about music as an intervention in these special populations," said Dykens. "We need to learn and it's time we start." VM

- JESSICA PASLEY

WEB LINK

To view a video of the ACM Lifting Lives Music camp, please visit www.mc.vanderbilt.edu/vanderbiltmedicine

Tornado!

Vanderbilt alum among first on scene of deadly Alabama twister

WRITTEN BY NANCY HUMPHREY PHOTOGRAPH BY MATT MCKEAN/TIMESDAILY

s Mark McIlwain, M.D., tended to victims from the April 27 F-5 tornado in Northwest Alabama, there were two things on his mind: the devastating injuries in both the living and the dead before him; and the safety of his 20-year-old daughter, MaryEllen, as the tornado barreled toward Tuscaloosa and the University of Alabama.

Shortly before 4 p.m. on that Wednesday, McIlwain, MD'90, HS'91, an oral and maxillofacial surgeon, was at home in Tuscumbia seeking shelter from the tornado with his wife, Connie, when he was called about mass casualties in nearby Phil Campbell, Ala. McIlwain, as chief of staff at Helen Keller Hospital in Sheffield, had helped write the area's mass casualty plan and was first on the emergency notification list. He made three phone calls, activating the "phone tree," and about 150 medical personnel were summoned to help.

Unaware of how crippling the tornado had been, McIlwain and Connie, his longtime office manager, drove 30 miles south "at breakneck speed" to Phil Campbell's Rescue Squad building. Along the way he called MaryEllen, a sophomore at the University of Alabama, to let her know the tornado was headed her way. He told her to



seek shelter in a bathtub in her condominium and to cover herself with a mattress.

"Just as I entered Phil Campbell, MaryEllen said she could hear the tornado coming, and the line went dead," McIlwain said. "As I tended to the injured, the broken bones and the dead, everybody I touched, I felt like it was her," he said, crying.

For 50 minutes he was the only physician on the scene; after the first hour, there was a team of six physicians, 12 nurses and 18 support staff.

"An F-5 tornado at 210 miles per hour can mutilate the human body, and nobody can be prepared for those type injuries," he said. "People had limbs missing and severe head injuries. Bodies were impaled with wood. Those who were out in the storm came in with their clothes torn off, and some were rolled 75 to 100 yards in dirt before the storm let them go. The magnitude was simply unbelievable," he said.

About an hour into treating the injured, McIlwain got an email on his phone. It read: "Daddy, I'm OK. Are you and Moma OK? MaryEllen."

But there wasn't time to pause. McIlwain triaged groups of patients, and then floated from group to group. Each ambulance leaving the scene was loaded with two critically injured patients, one less-injured victim, and a note listing needed supplies since McIlwain used all of his in 30 minutes. Patients were transported to three hospitals – Helen Keller in Sheffield, Shoals Hospital in Muscle Shoals or Eliza Coffee Memorial Hospital in Florence – after Russellville Hospital (the closest hospital) was filled in the first hour. McIlwain is on the staff of all three.

"A little boy was brought in with a broken, angulated arm, and I had run out of supplies. I remembered I had a *National*

Mark McIlwain, M.D., listens as his wife, Connie, who assisted him, describes the scene at the Phil Campbell Rescue Squad building the day the town was devastated by the F-5 tornado. Connie helped by taking notes on who came in and out of the makeshift medical facility. *Geographic* magazine in my truck, so I sent Connie to get it," McIlwain said. "I splinted his arm with that magazine and tape. It choked me up. In everybody I treated, I saw my child, my mama, my daddy. These are not well-insured or wealthy people. But they are good, solid country people."

As her husband treated the injured, Connie recorded their names, injuries and hospital in a notebook so there would be some record of where they were taken.

McIlwain said he was well-prepared in general surgery skills after training under Vanderbilt surgeons John Morris, M.D., John Sawyers, M.D., H. David Hall, M.D., Ralph Wesley, M.D., and Sam McKenna, M.D.

"As an oral and maxillofacial surgeon, I've seen a lot of face trauma. I'm trained in advanced trauma life support and am pretty good at handling trauma victims, but nothing could prepare me for the volume of patients that day and the severity of their injuries."

McIlwain said that he kept going on pure adrenaline, and "knowing that these people needed me."

By the time he left the scene at 1:30 a.m. on Thursday, there were 26 dead throughout Alabama, 18 of them in Phil Campbell.

McIlwain had to be at the hospital early Thursday morning to operate on some of the injured, then returned to Phil Campbell to take tetanus vaccine to the scene. On Thursday night, he went home, took a long bath and fell asleep on the sofa. He didn't wake until Friday morning. "I kind of ran out of gas," he said.

Estimating that he "laid hands" on 50 to 60 people, McIlwain said he "saw the best in people," during the crisis. At one point, the emergency crew needed water and sheets for bandages. Family members of a victim walked through the broken glass of a nearby store, filled up carts and brought supplies back. Residents of neighboring, untouched communities came in mass to help. "It was gratifying to my soul to see how everyone pitched in."

Students Organize Support for Tornado Victims

Matt McDonald, a second-year Vanderbilt medical student from Huntsville, Ala., paid close attention to the news reports on April 27 as a destructive line of storms barreled through his home state.

A 2009 graduate of Auburn University, he said he was in a state of shock as he watched reports of the damage the following day.

"The damage was so extensive that it took a day or two before people realized it," he said.

He and some friends quickly organized a relief effort for victims of the deadly tornadoes.

"It was a natural reaction to put something together here at Vanderbilt to help out people back home," he said.

He, Walker Plash, a first-year student from Mobile, Ala., and Natalie Ausborn, a second-year student from Gadsen, Ala., placed collection bins around the School of Medicine and the student body responded immediately with donations of clothing, bedding and toiletries.

At a previously scheduled school-wide party, Plash and McDonald collected monetary donations and with the help of Melissa Britton, an administrative assistant at the Monroe Carell Jr., Children's Hospital, they sent \$272 to the Alabama Governor's Emergency Relief Fund.

"I think the response was really good. There was a lot of support. Since Vanderbilt is so close to Alabama, there are a lot of people who are either from Alabama or attended school there or have friends and family from there. I was really pleased with the response," McDonald said.

Ausborn took some of the collected supplies to families who lost their homes while McDonald drove the rest of them down to Huntsville when he went home for the weekend. While he doesn't know anyone directly impacted by tornado, he saw first-hand the damage that touched several counties between Montgomery, Ala., and southern Tennessee.

"I've never seen anything that was so widespread. Every single county had significant damage," he said. - КАТНҮ WHITNEY

Later that week, on Saturday, McIlwain finally got to sit down with MaryEllen. It was only then that he realized how close the tornado came to his daughter. "She told me that she heard the tornado coming and the transformers exploding. It got within 150 yards of her. I broke down. I had to pray for a while."

McIlwain said that recovery in the area is going to be a long time coming. "It's not going to be over tomorrow."

The tornado that hit Phil Campbell killed 26 people, injured more than 60 and devastated most of the town's structures, totaling about \$30 million in wind and water damage. In Tuscaloosa, the tornado killed 41 people, devastated vital parts of the city's infrastructure, and destroyed or damaged more than 7,000 buildings. The twisters that twirled across Alabama killed 238 people in Alabama alone and another 100 or so in other states across the South.

Recovery may take years, but McIlwain sees it happening daily through an outpouring of goodwill – both individuals and groups of both friends and strangers doing their part.

And McIlwain is among a group of physicians associated with Helen Keller Hospital who has helped pay for a contractor to level a devastated medical practice of one of their colleagues, and to erect a modular building for the physician's temporary practice. Keith Morrow, M.D., lost his clinics in both Phil Campbell and Hackleburg, Ala. The pharmacies in both towns were also destroyed. "People are continuing to do the right thing," McIlwain said. VM

Medical student research inspired by grandmother's close call

WRITTEN BY LANE CHU CRAWFORD, M.D., MD '11 PHOTOGRAPH BY JOE HOWELL



In May 2007, on the morning of my college graduation, I sat with my grandmother in her room at Vanderbilt University Hospital. I was dressed in my cap and gown and stopped in to see her before heading to Alumni Lawn for the ceremony. Hearing her voice and seeing her smile was the best graduation present I could have asked for.

My grandmother's illness had surprised us all. At 82 years old, she had been the picture of health—active in her community and church, an avid gardener and world traveler, and the matriarch of our large family. A month before my graduation, this suddenly changed.

My grandmother had been hospitalized with abdominal pain, bloody diarrhea and vomiting. Initial studies suggested infectious colitis, but her stool culture came back negative, leading her doctors to consider other non-infectious diagnoses. Over the next few days, my grandmother's white blood cell count rose, her hemoglobin and platelet count dropped, and she developed renal failure and altered mental status.

My father, a surgeon, began to suspect hemolytic-uremic syndrome (HUS), a life-threatening condition usually caused by E. coli infection. Could the stool culture have been wrong?

Upon transfer to a regional hospital she was quickly diagnosed with ischemic colitis. My family was told that if her colon were not removed immediately, she could be dead within the hour. My grandmother underwent emergent total colectomy, but six days later remained comatose and dialysis-dependent. My father remained suspicious of HUS, especially after discovering that my grandmother had eaten undercooked meatloaf three days prior to her illness.

He reviewed the literature and learned that HUS is almost always caused by food borne infection with Shiga toxin-producing E. coli (STEC). The most common STEC serotype, O157:H7, is routinely tested for in most clinical laboratories. However, recent studies suggest that 20 percent to 50 percent of STEC infections may be caused by different serotypes. Testing for these requires a different type of assay unavailable at many labs, including the one at my grandmother's hospital. Her negative stool culture probably hadn't been wrong; it was just the wrong test.

My grandmother's nephrologist began a trial of plasmapheresis, a process that filters toxins from the blood and which may be beneficial in HUS. My grandmother's renal function began to improve, and four days later she woke up from her coma. She was transferred to Vanderbilt for the remainder of her care, where I was able to visit her the morning of commencement. Amazingly, my grandmother made a complete recovery.

In July 2007 I returned to Vanderbilt as a first-year medical student. During the first and second years, all students complete a research project as part of the Emphasis Program. When it came time for me to choose my research topic, my grandmother's experience immediately came to mind. If she had been tested initially for all STEC serotypes, might the course of her illness have been different? Why wasn't this test available in her hospital's laboratory? With these questions in mind, I set out to survey all clinical laboratories in Tennessee regarding their STEC detection protocols.

My results were alarming, but not altogether surprising. The Centers for Disease Control (CDC) recommends that labs include the tests for all STEC serotypes in all of their routine stool cultures. However, I found that only 11 percent of Tennessee labs were fully adherent to the CDC's recommendations.

Last fall, my grandmother's case report and the results of my survey were published in the journal *Emerging Infectious Diseases*. I hope that by sharing my grandmother's story with the medical community, other patients will benefit from her close call. For my part, it was incredibly rewarding to take a topic of personal interest and follow it through from study design to publication. I met fantastic mentors and discovered an interest in quality-improvement research that I hope to pursue further during residency.

In May, I graduated from Vanderbilt University School of Medicine, and my grandmother was there, this time in the audience. VM

Lane Crawford, M.D., will be doing her Internal Medicine internship at Vanderbilt, followed by an Anesthesiology residency at Massachusetts General Hospital.

NURTURING TOMORROW'S LEADERS

Record number of medical students receive national honors A renewed focus on developing leaders, beginning in the earliest years of medical school, has resulted in a record number of Vanderbilt medical students earning spots in prestigious nationally-competitive research fellowships, dual degree programs and AmeriCorps for 2011-12.

This year, four students earned Howard Hughes Medical Institute fellowships, of which only 70 are awarded. In addition, three students were awarded the prestigious Fogarty Scholarships. More than 25 percent of students recognized below are minority students.

"A central and distinguishing feature of a Vanderbilt education is to provide guidance and mentoring for our students as they journey along the path toward national leadership in science and medicine," said Jeff Balser, M.D., Ph.D., vice chancellor for Health Affairs and dean of the School of Medicine. "In this 10th year of the Emphasis Program, we celebrate the many ways students in our School of Medicine are encouraged to achieve top-tier scholarly achievements outside the classroom. Complementing their clinical and basic science training, we know these experiences are serving as catalysts toward making our students tomorrow's leaders."

NAME	VMS YEAR	INSTITUTION
Medical Scholars	1 1	
(sponsored by Vanderbilt)		
Sandeep R. Bhave	2	Washington University School of Medicine
Marissa C. Blanco	3	Charite University, Berlin
Sravan C. Dhulipala	3	Emory University and Madras Diabetes Research Foundation
Peter B. Knowlton	3	Berlin Eye Research Institute
Rachel M. Ruiz	3	Monroe Carell Jr. Children's Hospital at Vanderbilt
David M. Silvestri	3	Vanderbilt/various international sites
Victoria M. Wurster	3	Fundacion INFANT Buenos Aires, Argentina
Howard Hughes Medical Institute		
Sarah K. Bourne	3	Massachusetts General Hospital (Harvard University)
Emory L. Hsu	3	NIH Cloister Program
Akshitkumar M. Mistry	3	Vanderbilt University
Grace C. Shih	3	NIH Cloister Program
Fogarty Scholars		
Brian Barnett		Fulbright-Fogarty Fellowship in Public Health, UNC Project - Malawi
Matthew G. Gartland	3	
	3	University of Alabama/ Center for Infectious Disease Research - Zambia
Rafal Sobota	3	Fulbright-Fogarty Fellowship in Public Health – Mali
Centers for Disease Control and Prevention	,	
Atlanta, Georgia		
Fernando Ovalle, Jr.	3	Applied Epidemiology Fellowship, Division of Injury Response
Doris Duke Clinical Research Fellowship		
Edem Binka	3	Columbia University College of Physicians & Surgeons
AmeriCorps Teaching Program		
Shannon McConnaughey	3	Red Cloud Indian School, Pine Ridge, South Dakota
Dual Degrees		
David Friedlander	3	MPH, Harvard University
Dustin Hipp	3	MBA, Owen School of Management
Tendi Hungwe	3	MPH, University of Michigan
Allison Martin	3	MPH, Harvard University, Zuckerman Fellowship
Billy Sullivan		M.Ed., Vanderbilt University
Maria Tamborski	3	MSTP-CIT (Clinical Investigation Track), Vanderbilt University
	2	
Danielle Wright	3	MPH, UNC-Chapel Hill
National Leadership & Recognition		
David Marcovitz	3	AMSA National Vice President for Membership
Ravi Patel	2	2011 AMA Foundation Leadership Award
Michael Pelster	2	1st place in medical student/resident research competition,
		American Academy of Emergency Medicine Scientific Assembly

- canby robinson society

RESIDENT'S LETTER

Dear Canby Robinson Society Members:

As donors, we support scholarship programs through renewable annual gifts that can be put to use right away.

The Canby Robinson Scholarship is the most distinguished of the School of Medicine scholarships and provides full tuition for four years of medical school. The Canby Robinson Society Board and the School of Medicine have a shared goal to attract a diverse group of exceptional students who will become future leaders and scholars in medicine. A committee of the Canby Robinson Society Board met in March to recommend the recipients of the Canby Robinson Scholarship, and because the applicants are so highly qualified, the group found the task of scholarship review to be very challenging.

At Vanderbilt University School of Medicine, we provide an innovative curriculum, a supportive environment designed to promote health and wellness in our students and wonderful research

.

opportunities. Last year, we received more than 5,000 applications for just over 100 first-year spots. The average GPAs and MCAT scores of our applicants continue to rise. But we are in a tough competition with our peer institutions for the best and brightest students. In that race, we fall short in the scholarship arena.

For students, medical school is an expensive investment in the future. Right now, we can only meet about 22 percent of the financial need of our medical school students, and 71 percent of our students graduate with debt. The average debt load for our students after graduation is more than \$126,000. Increased scholarship assistance would allow our students to choose a specialty based on their passion, not on its capacity to pay off their debt.

Praise and recognition are due to several standout champions for scholarships in our midst. Robert Collins, M.D., has dedicated many years of service on the Scholarship Steering Committee as have past presidents of the Canby Robinson Society, Judson Randolph, M.D., Robert McNeilly and Lonnie Burnett, M.D. We

all are grateful to these devoted leaders who altered the landscape for scholarships. Bravo!

We can do more to help keep Vanderbilt within reach for top students by supporting scholarship efforts at the School of Medicine. Learn more by contacting Mary Beth Thompson at (615) 322-8846 or mary.beth.thompson@vanderbilt.edu.



Paul Sternberg Jr., M.D. Canby Robinson Society president

VANDERBILT UNIVERSITY SCHOOL OF MEDICINE SCHOLARSHIP FACTS AND FIGURES

By any measure, the caliber of Vanderbilt's medical students continues to rise. Scholarship support enables the School of Medicine to continue to attract talented students. Many alumni of the Medical School gather with classmates to support scholarships. The Class of 1978 established an endowed scholarship fund in 2007, and the Class of 1989 followed suit. The classes of 1953, 1975, 1979 and 1990 and others are on their way to doing so as well.

Class of 2014 Average GPA 3.8

Average MCAT 11.6

Average debt for graduating medical students in 2010 \$126,700

Philanthropy provided approximately in scholarship awards in the 2010-11 academic year.

Gifts in any amount from alumni and others help to support scholarship efforts.

BUILDING NEW HOPE FOR CHILDREN

John Stein has been a Vanderbilt supporter for several decades – in fact, since he was recruited as an undergraduate to the men's swimming team in 1969. From there, he relayed straight through a Master's in Business Management from Owen into a successful career in banking. Today, Stein is the president of Bank of America Tennessee.

Stein began his service to Vanderbilt when he joined the board of Monroe Carell Jr. Children's Hospital at Vanderbilt in 2003. "In pretty short order I learned about everything else the university has to offer. Vanderbilt has so many facets, which makes it a gem not only locally, but regionally, nationally and even internationally," he said.

In the intervening years, Stein has also served on the Medical Center board and most recently, on the Athletics Committee. He has continued to serve on the Children's Hospital board and was named chair in 2008. Under his leadership, Children's Hospital has recently broken ground on a major expansion which will add 30,000 square feet, 33 neonatal, acute care and medical-surgical beds, and expanded programs in prematurity, heart disease and pediatric cancer.

For this latest expansion, the Bank of America Foundation has donated \$1 million to the Children's Hospital capital campaign. For 21 years, Bank of America has been the presenting sponsor of the annual Iroquois Steeplechase, with proceeds going directly to hospital programs.

"To be a responsible corporate citizen, we think it's important to give back to the communities where we live, work and play," Stein said. "Children's Hospital is a tremendous example of Vanderbilt's commitment to the collegial sharing of ideas and research. This collaboration has a strong impact on discovery, treatment and ultimately, outcomes."

Stein began his banking career in 1975 as a management trainee and has



"Vanderbilt has so many facets, which makes it a gem not only locally, but regionally, nationally and even internationally." – John Stein

held a variety of executive positions. In 1980, he opened the trade finance office in New York City for a predecessor to Bank of America and was named executive vice president and manager of the international division two years later. He moved back to Nashville in the early '80s to marry his wife, Beth, a Nashville native. Their son, Tyler (VU '12), is continuing the Vanderbilt tradition.

In 1987, Stein became executive vice president and manager of Bank of America's regional Commercial Banking Group. He was named to his current position as Tennessee President in 2002. In addition to his role as president, he serves as Bank of America's National Market Executive, For-Profit Healthcare. In this role, he manages the bank's national for-profit health care operation, loaning money to hospitals, biotech companies and other health care entities.

Stein doesn't swim competitively anymore, though several years ago he and the members of his Vanderbilt relay team got back together to successfully compete in the U.S. Masters – breaking their age group record. These days, he sticks to tennis, biking and skiing. He also loves music and has been an avid supporter of Nashville's music community through the W.O. Smith School, Leadership Music and other organizations.

- MEREDITH CARR







PATIENTS 'SIGN OFF' ON LAUNCH OF HOSPITAL EXPANSION PROJECT

The Monroe Carell Jr. Children's Hospital at Vanderbilt hosted a beam signing celebration in April to mark the start of a 33-bed expansion project.

Vanderbilt officials, community members, patients and families gathered to celebrate the hospital's continued mission to offer the best, high-quality care for children in the region and across the nation. The \$30 million expansion is part of a multi-year, multi-phase project to ease a growing demand for more space and services.

To recognize the kickoff of construction, about 100 guests signed a 14-foot yellow beam that will be installed as a permanent fixture of history in the expansion infrastructure.

"The beam signing event acknowledges Vanderbilt's unwavering commitment toward improving the lives of our youngest patients and the lives of all children in our region," said Jeff Balser, M.D., Ph.D., vice chancellor for Health Affairs and dean of the School of Medicine. "The launch of this expansion marks an important milestone for the region's only resource for many children with life-threatening diseases."

The added neonatal, acute care and medical-surgical beds housed in the new five-story facility will be adjacent to, and an extension of, the existing building's fourth through eighth floors.

Also, capacity will increase to accommodate premature babies who are transferred to Children's Hospital from outlying hospitals.

During the event, plans also were announced for a Capstone Challenge to reach a \$13 million fundraising goal for the expansion, of which about \$9 million has been secured. Once the \$11 million mark is reached, the Ingram Charitable Fund will give the remaining \$2 million, a contribution facilitated by Orrin H. Ingram II, a longtime supporter of Vanderbilt.

The event was an especially heartfelt moment for the families who walk through the doors of Children's Hospital every day.

"The expansion allows more children and their families to be served and cared for," said Susan Waggoner, a member of the Family Advisory Council and mother to Dalton, a 6-year-old patient who has been treated at Children's Hospital since he was diagnosed with a congenital heart defect when he was just 2 days old.

An extra \$20 million will be raised for programmatic enhancement to address Tennessee's most prevalent childhood diseases.

"As a world-leading research university, Vanderbilt has a responsibility to discover new cures for children with life-threatening diseases, while providing the finest possible child-centered care for children

(left) Daniel Waggoner, 11, signs the beam at an event kicking off construction for the expansion of the Monroe Carell Jr. Children's Hospital at Vanderbilt. (right) Kenette Jones and her son, Trent, 2, add their names to the beam.

throughout the region, " said Luke Gregory, CEO of Children's Hospital.

Award-winning country music group Rascal Flatts, which has been among the many supporters of Children's Hospital, appeared in a video of congratulations to the hospital. In the past few years, the group has raised more than \$3 million for the hospital's capital project.

"Today is about growing this fabulous hospital and being able to reach out and serve many more patients," said John Stein, president of Bank of America Tennessee.

Among the additional services, multiple programs will expand, including Pediatric Bone Marrow Transplantation, Cardiac Surgical Intensive Care and Congenital Heart Disease. Currently, Children's Hospital is the only hospital in Middle Tennessee to offer these services.

"This construction allows us to go forward in serving our children and their families while alleviating some of the space issues we are having with increased volumes," said John W. Brock III, M.D., the Monroe Carell Jr. Chair and surgeonin-chief for Children's Hospital.

- CHRISTINA ECHEGARAY

For more information about the Canby Robinson Society, contact the Stewardship office, Vanderbilt University Medical Center, 2525 West End Ave., Suite 450, Nashville, Tenn., 37203 (615) 936-0439, or email: dar.med.stewardship@vanderbilt.edu; www.mc.vanderbilt.edu/crs.

IN BRIEF

SCHOLARSHIPS HELP ATTRACT LEADERS TO MEDICAL SCHOOL

People often associate scholarships with financial aid – helping students afford the cost of higher education – and at Vanderbilt University School of Medicine, this rings true. But here, scholarships also help the School of Medicine. How? By enrolling the best and brightest students and turning them into tomorrow's leaders and scholars.

"Scholarship programs target exemplary students with the potential to be great leaders," says Bonnie Miller, M.D., senior associate dean for health sciences education.

The costs and debt associated with medical education continue to grow rapidly and contribute to challenges for students navigating an educational and career path. The average debt for Vanderbilt's graduating students in 2010 was \$126,700, which includes debt from their undergraduate education.

Scholarship awards not only ease the debt burden of future physicians but permit the student to select a specialty according to expertise, interest and passion. A student's financial aid package often includes scholarship support.

Philanthropy contributes significantly to the scholarship funds received by students each year, including the Canby Robinson Scholarship program. This year gifts from alumni, parents, foundations and other individuals enabled approximately \$3 million in scholarship funds to be distributed. Contributions in any amount make a difference in the scholarship funds available. Additional scholarship support comes from School of Medicine institutional funds.

"Programs like the Canby Robinson Scholarships help us meet our mission of developing tomorrow's leaders," Miller says. "And when we talk about leadership, it's not just in the practice of medicine. It's also in research, in communities, in organizations. The strength of our program is proven by what our students do after medical school. We see these scholarships as an investment in the future of medicine."



WHITE COAT SPONSORSHIP - TAILOR-MADE FOR MEDICAL STUDENTS AND MENTORS

- The White Coat Sponsorship Program began in August 2002 when faculty and friends were asked to sponsor a white coat for a new medical student with a \$100 sponsorship, which covers the cost and personalization of the coat.
- The traditional short, white lab coats are distributed to first-year medical students in a special ceremony in August.
- The sponsor of a white coat is matched with a student, and this can be the beginning of a supportive relationship.
- Sponsorship support comes from alumni, faculty, parents and friends of the School of Medicine.
- Sponsors may send their gift any time during the year, however, potential donors are encouraged to have all the sponsorships in by the end of the first week in August.
- The number of sponsorships has grown from 104 in 2001 to 650 white coat gifts from 424 donors in 2010. Fourteen of the sponsors made their sponsorships at the Canby Robinson Society level, sponsoring 10 white coats each.
- Additional funds raised through this effort are used to support educational opportunities for the students.

web links

Interested in being a white coat sponsor? Please visit www.mc.vanderbilt.edu/whitecoat

:: alumni journal

ANN H. PRICE, M.D.

Associate Dean for Alumni Affairs, School of Medicine



As this letter is being submitted, our Vanderbilt Medical Alumni Association (VMAA) is hosting an "Almost Alumni Luncheon" (our eighth such event) for the Vanderbilt University School of Medicine (VUSM) Class of 2011. The VMAA is proud to welcome the Class of 2011 as our newest active alumni members. I send my thanks to all our alumni who participated in the VMAA Host program and housed many of these students during residency interviews. An equal thanks goes out to all of you who are currently serving as VMAA mentors for these recent graduates. The cycle of interviewing, matching, graduating, and moving for residency training will gear up soon for the VUSM Class of 2012. If you would like to participate in our VMAA Host and/or Mentoring Programs please contact me at: ann.price@vanderbilt.edu.

Vanderbilt Medical Alumni Open House, Oct. 21

While we will not have a medical reunion in 2011 (medical reunions are held biennially on even years), the VMAA will host an Open House during the 2011 VU Homecoming festivities. We invite all those coming to campus for VU undergraduate reunions to join us for this event on Oct. 21, 2 - 4 p.m.; third-floor student lounge, Light Hall.

VMAA Board Welcomes New Members

The VMAA Board welcomed Oran Aaronson, M.D., HS '00, as the William Meacham Society representative in February. The Board also recently welcomed postdoctoral representative Gregory Digby, M.D., FE '08, house staff representatives Aaron Shaver, M.D., HS '07, Kevin Sexton, M.D., HS '07, and VMS student representative Scott Zuckerman (VUSM, Class of 2012).

Abenity

One of the great benefits of being part of the larger Vanderbilt University family is sharing in the Vanderbilt Alumni Association's benefit programs. A new program that may be of interest to our VMAA members is Abenity, a comprehensive discount program Vanderbilt Medical Alumni Association Vanderbilt University Medical Center Phone: (615) 343-6337 Fax: (615) 936-8475 medalum@vanderbilt.edu https://medschool.vanderbilt.edu/alumni

for all Vanderbilt alumni. Details about the Alumni Discount Program administered by Abenity may be found at: www.vanderbilt.edu/alumni.

VMAA Events/Programs

We send thanks to both Wyatt Rousseau, M.D., MD '69 (Dallas) and Carl Grote, M.D., MD '54, VMAA Board Regional Representative (Huntsville, Ala.), for hosting regional dinners in Dallas, and Huntsville respectively. The VMAA has also hosted specialty society events for the Scott, Meacham, Friesinger, Luton and Röentgen Societies. Perhaps our greatest area of recent VMAA programmatic growth has been in the area of support for our students, post-docs, and departments as we have assisted with efforts for two IRB-approved medical alumni surveys; the Microbes and Defense Academic Society's 20th anniversary celebration; the Post-Doctoral Fellows Poster Symposium, the BRET Program's Graduation Luncheon; and the Vanderbilt University Institute of Imaging Science (VUIIS) Retreat, among other activities. We are staying busy!

Worthy of Note News

One of the most enjoyable aspects of my role with the VMAA is hearing from you. Please take a moment to submit your "Worthy of Note news" for our next Vanderbilt Medical alumni news section. Send your news and digital photographs to medalum@vanderbilt.edu; or fax to (615) 936-8475; or mail to VUMC, 21st Ave South and Medical Center Drive, MCN D-8212, Nashville, TN 37232-2106.

With very best wishes,

ann N. Price

CONTACT

Read Vanderbilt Medicine online, and send in your alumni news at www.mc.vanderbilt.edu/vanderbiltmedicine. Digital photos (200-300 dpi and at least 4 by 6 inches) are always welcome and will be included as space permits.

KEY MD - Medical School Graduate HS - House staff FE - Fellow FAC - Faculty * Indicates CRS member

50s *John Boldt, M.D., MD '54, HS

59, was recognized at a surprise gathering in February in Austin, Texas. Boldt thought he was going to Austin to ask for funding for the Blood and Tissue Cord Blood Project, but instead, State Sen. Leticia Van de Putte introduced Senate Resolution No. 88 in the Senate of the State of Texas recognizing Boldt for "his many outstanding contributions to the field of medicine and for exceptional care to his patients, for serving as a mentor and guiding medical students, in particular for his legacy of compassion and dedication." In attendance were colleagues, family and friends, his medical students and residents. After the events at the capital, a reception was held at the Texas Medical Association building. In other news, Boldt became a great-grandfather on Jan. 28 with the addition of Luke William to his family.

Angus W. Graham Jr., M.D., MD

55, is the owner of the Manatee Diagnostics Center. He opened the fifth site in Arcadia, Fla., one year ago. They are a full-service imaging center with 80 employees and see about 250-300 patients a day. He and his wife, Wylene, have five children, all of whom are married and work in the medical field. They have 17 grandchildren. Their latest trip was in February to Churchill Manatoba, Canada, to see the Aurora.

*Norman Hoffman, M.D., MD '50, 86, retired from the practice of colorectal surgery. His surgical group. Los Angeles Colon and Rectal Surgical Associates, continues with five surgeons. His son, Gary Hoffman, M.D., MD '78, is the senior surgeon in the group. His daughter, Andrea, is a homemaker and retired part-time ballerina. Hoffman and his wife, Rachael, are enjoying retirement. They spend their days enjoying hobbies, trips to the beach, and walks in the park. They have six grandchildren.

***David Hong, M.D.,** MD '67, HS '72, is a retired Navy captain. He recently traveled on a monthlong exploration in Egypt. He has a granddaughter, Isabele, age 15.

*James King Jr., M.D., MD '61, was appointed to the medical



*Clifton Meador, M.D., MD '55, HS '60, FE '61 far left, last row, hosted a pre-game party at his home for members of the class of 1955.



The Vanderbilt Institute for Global Health (VIGH) announced plans to establish the LeRoy F. Heimburger, M.D., Global Health Education and Training Fund, which will create student medical exchanges with Shandong Medical University in Jinan, the capital city of Shandong Province, China. LeRoy's grandson is VIGH associate director of education and training, **Douglas Heimburger, M.D.,** MD '78. Douglas's greatgrandparents were missionaries to China and lived there for more than 50 years. The endowed LeRoy F. Heimburger scholarship is seeking donations to support educational exchanges between Vanderbilt and Shandong. The scholarship will be offered on a competitive basis to medical students, residents, fellows and nursing students and funds are expected to be available by 2012. ***Douglas Heimburger** is pictured above, second from right, with L. Corbett Heimburger, **Robert Irvin L. Heimburger, M.D., MD '57, Richard A. Heimburger, M.D., MD '61,** and (seated) **Robert F. Heimburger, M.D., MD '43**.

school admissions committee at the University of Kentucky Medical School in Lexington, Ky.

*John Neeld Jr., M.D., MD '66, HS '67, retired after 37 years of practice at Northside Hospital in Atlanta in December 2010. He was chairman of the Department of Anesthesiology for 22 years and a member of the hospital board for 18 years. He continues to chair the American Society of Anesthesiologists delegation to the AMA and to serve on the board of the Medical Association of Georgia Mutual Insurance Co.

J. Michael Reinhart, M.D., MD '67, HS '68, retired from the practice of Psychiatry in 2005. He spends his time hanging out with his wife, singing old songs with senior citizens suffering from dementia, and taking swimming classes. He says that his five years at Vanderbilt were "the best educational experience of my life."

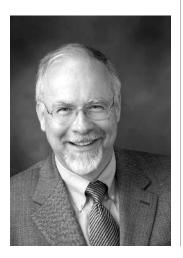
*William Schaffner, M.D., HS '62, FE '64, FAC '69 – present, a professor and chairman of the Department of Preventive Medicine at Vanderbilt, received the prestigious Duncan Clark Award from the Association for Prevention Teaching. The award is given to a senior-level person with a distinguished record of achievement in the areas of teaching, research and advocacy in preventive medicine and public health.

*Andrew Walker, M.D., MD '60, reports that his son, Bruce (VU '89), is attending McCall School of Business, pursuing his MBA. His daughter, Heather, has been promoted with AT&T while her husband flies executive jets.

Freemont P. Wirth, M.D., MD '66, is actively practicing Neurosurgery and is surgical director of the Brain Tumor and Movement Disorders Program at St. Joseph's Hospital in Savannah, Ga. He and his wife, Lynn, have six grandchildren, ages 2 to 6, and a seventh on the way.

70s *Jeffrey B. Carter M.D., DMD, MD '78, HS '80, recently delivered the 5th Annual Pinson Memorial

F. Bradford Meyers, M.D., MD '81, of Jefferson, Wisc., has been elected to serve as presidentelect for the Wisconsin Academy of Family Physicians (WAFP). The election of officers was held at the WAFP's 62nd Annual Meeting on Feb. 4 in Milwaukee. WAFP represents more than 2,500 dedicated family physicians, residents and students throughout Wisconsin.



Lecture in Oral and Maxillofacial Surgery at Howard University School of Dentistry. The presentation was entitled: "Megatrends in Oral and Maxillofacial Surgery: Healthcare Reform, Technology, Diversity, Subspecialization, and Educational Debt."

*David M. Gershenson, M.D., MD

'71, FE '70, was appointed cochair of the National Cancer Institute's Gynecologic Cancer Steering Committee for a threeyear term. He is a professor and chairman of the Department of Gynecologic Oncology and Reproductive Medicine at the University of Texas M.D. Anderson Cancer Center.

J.W. Hendricks, M.D., MD '76, has left the practice of primary care pediatrics to become medical director of Blue Cross Blue Shield of Oklahoma.

Joseph W. Huston, M.D., MD '71, HS '77, FE '78, joined Vanderbilt's faculty in October 2007 as assistant professor of Medicine.

John M. Mathis, M.D., MSc, MD '76, HS '80, has authored three books: "Percutaneous Vertebroplasty and Kyplioplasty" (Mathis, Deramond, Belkoff); "Image-Guided Spine Interventions," second edition (Mathis,Golovac); "Neuroimaging Clinics of NA – Image Guided Spine Intervention" (Mathis).

*Ed Settle, M.D., MD '71, HS '73, has two grandchildren and a third on the way. He and his wife recently purchased a new house to give the grandchildren more room to play.

*Kathy Bertram, M.D., MD '86, HS '90, is now employed by Cookeville Regional Medical Center. She practices general internal medicine and geriatrics. She is the medical director of two skilled nursing facilities and is also an active member of the



worthy of note

Profiled in author Michael Lewis' No. 1 best-selling book "The Big Short," *Michael Burry M.D., MD '97, is bestknown as the first financial analyst to predict America's financial collapse. Burry foresaw the failures of financial giants such as AIG, Fannie Mae, Freddie Mac, Countrywide Financial, and Washington Mutual, and actively bet against their survival. He studied economics and pre-medical training at UCLA before enrolling at the Vanderbilt University School of

Medicine. Continuing his medical education as a resident at Stanford University Hospital, he made the decision to leave the field of medicine after his third residency year and found Scion Capital. His transition into the world of finance was eased by his years of running a finance website that had been chosen as a *Forbes* "Best of the Web" winner in stock picking. After experiencing the loss of his left eye to cancer when he was a child, Burry was diagnosed with Asperger's Syndrome as an adult. As a result, Burry brings a unique perspective on the economy and on financial markets. Burry spoke at Vanderbilt in April on "Missteps to Mayhem: Inside the Doomsday Machine with the Outsider Who Predicted and Profited from America's Financial Armageddon."

hospital ethics committee. Her daughter, Amy, and her husband, Matt, live in Nashville. Amy is completing a Ph.D., in French film and teaching part time at Watkins Institute. Matt is a real estate agent and photographer.

Melanie Hinson, M.D., MD '82, HS '85, received the 2010 Physicians' Exceptional Contribution Award which is the highest recognition for the Southern California Permanente Medical Group physicians. It has about 5,300 physicians in the southern California area. Each year 12 exceptional contribution awards are given to physicians who have made significant contributions to the SCPMG medical group or the community.

*Joyce Johnson, M.D., MD '86, HS '91, FE '92, was recently promoted to professor of Pathology Todd Huber, M.D., MD '99, and his wife, Tysha, announce the birth of a son, Charles Crawford, born on Jan. 13. He joins big brothers, William, 7, and Henry, 5.





Monita Soni, M.D., HS '97, and her daughter, Abha, who is a secondyear medical student in Atlanta, took a trip to Agra and Ranthambore tiger sanctuary in Rjasthan, India, in summer 2010. Although they did not see any tigers, they saw plenty of antelope. Abha took lots of photos and when they came home, they painted these 6' x 4' canvases inspired by miniature Indian paintings with deer. They serve as a reminder of their trip together and the fun they had painting them.

at Vanderbilt. Her son Matt is a junior in college and daughter Anna is a freshman. Her youngest child, Margaret, is 9 and in the fourth grade.

Philip A. St. Raymond, M.D., MD '82, closed his Sterling, Va., urology practice after 23 years and moved to Scottsdale, Ariz., to open a reduced hours solo practice in Lake Havasu City. He and his wife, Barbara, now live within three miles of their daughter Kristin, 28, who was born before Raymond's graduation from VUSM. Their son Marc, 27, lives and works in downtown San Francisco. The Raymonds are enjoying the warm desert climate and being closer to their children.

*Marc Shelton, M.D., MD '84, HS '87, has been elected governor of the Illinois division of the American College of Cardiology (ACC), a position he will hold for three years. He currently serves as the president of Prairie Cardiovascular Consultants in Springfield, Ill., and is a physician at the Prairie Heart Institute at St. John's Hospital. Dennis M. Smith, M.D., FE '82, has been tapped to serve as the chief executive officer for RedPath Integrated Pathology, Inc., a molecular diagnostics company dedicated to the effective diagnosis and treatment of cancer.

W. Terry Stallings, M.D., HS '89, has joined HCA West Florida Healthcare as its senior vice president for Medical Affairs and chief medical officer. In his new role, Stallings will oversee the functions of the medical staff, including credentialing, quality initiatives, education and research activities, assist in implementation and enforcement of hospital policies and medical staff development.

90s

Anne Marie Amies, M.D., MD '97, opened a new clinical service at Seattle Children's in pediatric and adolescent gynecology two years ago.

Michael Bobo, DDS, M.D., MD '97, HS '00, is practicing oral and maxillofacial surgery with offices in Murray, Ky., and Union City, Tenn. He opened a new office in Murray and added a second surgeon in 2010. He and his wife, Sharon, are celebrating 20 years of marriage in 2011. They have three active sons ages 10, 9 and 7. They live on a farm near Murray, breeding and shoeing black Clydesdale horses.

*Sam S. Chang, M.D., MD '92, HS '94, assistant professor of Urology at VUSM, was recently named the 2011 recipient of the prestigious American Urological Association Gold Cystoscope Award. He and his wife, Michelle, have three girls ages 15, 13 and 9.

T. Chadwick Eustis, M.D., MD '96, HS '01, has accepted a position with Roper Saint Francis Healthcare in Charleston, S.C. He is the first chair of the Department of Surgery at the newly opened Mount Pleasant Hospital. He and his wife, Elaine, moved with their three children to Elaine's hometown of Mount Pleasant where Elaine is practicing Gynecology at Mount Pleasant Hospital. Their daughter Sarah attends Elaine's alma mater, Ashley Hall. Their sons, John and William, attend the University School of the Lowcountry.

*Benjamin Peeler, M.D., MD '91, HS '98, moved to Charlotte, N.C., one year ago to become the head of the Children's Heart Center at Levine Children's Hospital / Carolinas Medical Center. He was previously head of pediatric cardiac surgery at the University of Virginia.

Richard Ramnath, M.D., MD '96, is an associate professor of Radiology at the newly formed University of Central Florida where he has had the privilege of working with former VUSM senior associate dean, Deborah German, M.D., and witnessing her great leadership as she works diligently to make UCF a premier medical school. He recently ran into classmate, Madhav Boyapat, M.D., MD '96, and his family at Disney World.

Jasminka Criley, M.D., HS '98, associate director of St. Mary's



Sister Mary Diana Dreger, M.D., MD '01, HS '04, Henry Harrell, M.D., MD '94, Yasmine Ali, M.D., MD '01, FE '01, and were inducted as Fellows of the American College of Physicians on April 7.

:: alumni news

Internal Medicine Residency Program and clinical professor of Medicine at the UCLA School of Medicine, was recently chosen by the American College of Physicians as one of the top 10 hospitalists in the nation. The honorees were recognized for making notable contributions to clinical skills, innovation, community involvement, work flow and other areas.

2000-

Justin Bachmann, M.D., MD '06, was elected chair of the American Medical Association's Resident and Fellow Section. His one-year term began in June. As chair he'll be interacting with the ACGME regarding work hour rules and other issues of interest to residents. Bachmann is a cardiology fellow at UT-Southwestern Medical Center.

Behin Barahimi, M.D., MD '07, and Brett Inglis, M.D., were married in 2010. They met when she was an intern and he was a senior resident in the intensive care unit at Albert Einstein Medical Center in Philadelphia. She is a fellow in oculoplastics at the University of Minnesota, and he is an attending in Gastroenterology.

Andrew S. Camarata, M.D., MD '06, just completed a tour of duty at the NAVY Experimental

Clint Devin, M.D., MD '02, HS '07, and Jessica Devin, M.D., MD '02, HS '03, FE '07, announce the birth of their son, Conor Koch, born on Aug. 9, 2010.





Jennifer Haskell Czosek, M.D., MD ⁶02, and her husband, Rick, welcomed baby William on Nov. 17, 2010.

Diving Unit as an undersea medical officer. He was stationed at NEDU from 2008 – 2011. He moved to Atlanta, Ga., to begin Radiation Oncology training at Emory University as a PGY-2. He was married in Watersound, Fla., to Molly Martin of Wetempka, Ala., on March 5.

Allison Floyd, M.D., MD '10, is engaged to marry Brian Wasserman, M.D., MD '09. She is a Pathology resident and he is a Medicine resident, both at Vanderbilt.

Lynn M. Holliday, M.D., MD '07, joined Primary Care Partners, PC in Grand Junction, Colo., in August 2010. She is enjoying a great job doing office and hospital family medicine including low-risk obstetrics. She now has a family of three, having celebrated her son, Weston's, first birthday in August 2010.

Greg Munson, M.D., HS '08, completed the VA Quality Scholars Fellowship in Tennessee in 2008, during which he did his MPH at Vanderbilt, followed by a GI fellowship at the Mayo Clinic where his research focused on quality in endoscopy. He recently joined Northwest Gastroenterology, a single specialty private practice with eight physicians and two physician assistants in Bellingham, Wash.

Victor Soukoulis, M.D., MD '07, has moved to Boston, Mass., for a Cardiology fellowship at Brigham and Women's Hospital.

Elizabeth M. LiCalzi, M.D., HS '09, and Mark B. Van Deusen, M.D., HS '09, were married March 10 in Celebration, Fla. Both are secondyear residents at Vanderbilt, she in Psychiatry and he in Otolaryngology. They both received medical degrees from the State University of New York.



Georgina Abisellan, M.D., HS '70,

died May 19 in Thomasville, Ga. Dr. Abisellan was an ophthalmologist in her native country of Cuba. In the late 1960s she immigrated to the United States with her family and did a residency in Psychiatry at Vanderbilt and then entered private practice in the Donelson/ Hermitage area of Nashville. She was instrumental in the creation of the Psychiatric Unit at Donelson Hospital/Summit Medical Center, where she served as its director for many years. Dr. Abisellan is survived by children, Raulie, Georgina and Maria; and four grandchildren.

*Jeff Barrett, M.D., HS '80, FE '80, died March 29. He was 59. He was the first fellow in Maternal-Fetal Medicine at Vanderbilt from 1980-1982. He then continued his academic career at Indiana University School of Medicine as assistant professor. In 1986 he moved to Lakeland, Fla., joining Watson Clinic. In Lakeland he delivered 8,428 babies at Lakeland Regional Medical Center, where he was also president of the medical staff for two years. Dr. Barrett is survived by his wife, Diana; and children, Matthew, Samuel, Alison and Emily.

Claude C. Cowan Jr., M.D., HS '58, died Nov. 23, 2010. He was 89. He served in the Medical Detachment III Corps Headquarters in Europe during World War II. Dr. Cowan was a member of the Christie Pediatric Group in Greenville, S.C., until his retirement. He worked part-time with the Beaufort County Health Department. He was a resident of the Foothills Presbyterian Home and a member of Easley Presbyterian Church. He is survived his wife, Katherine; and sons, Samuel and Walter,

Daniel L. Dolan, M.D., MD '55, HS '60, FE '60, died May 26 in

Asheville, N.C. He was 80. He was a captain in the U.S. Air Force, based in Japan. He practiced Internal Medicine in Springfield, Mo., from 1961 to 1977. He moved to Asheville in 1977 and accepted the role of director of Continuing Medical Education at the Mountain Area Health Education Center (MAHEC). Dr. Dolan was also a professor of Medicine with the University of North Carolina at Chapel Hill. He retired in 1995. He is predeceased by his wife, Betsy, who died in 2010. He is survived by his son, David, and one grandchild.

Ernest W. Eberling, M.D., MD '44, HS '45, died in January. He was a U.S. Air Force veteran, serving in World War II in the Philippines. He did his residency in New Orleans and began medical practice in Starkville, Miss. He then moved to Tucson, Ariz., where he was in private practice for 40 years. He is predeceased by his first wife, Judy, and survived by his wife Elsa; children Gayle and Edward; stepsons Winthrop and Sean; two grandchildren; and three step-grandchildren.

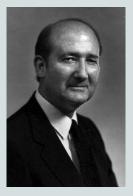
Paul C. Ellzey, M.D., MD '51, died Jan. 15. He was 89. He honorably served in the war as a pilot, bombardier and navigator. Upon completing his tour of duty in the military, he remained in the Air Force Reserves. In 1953 he established his medical practice in Booneville, Miss., and opened the Booneville Medical Clinic. As a family practitioner for 44 years, he deeply cared for his patients, their family members and his clinic staff. Dr. Ellzey retired from his medical practice in 1997 at the age of 76 and moved to Tupelo. He was preceded in death by his wife, Dena, and is survived by children. Paula. Elta, Marla, Michael and Rex; eight grandchildren; and two great-grandchildren.

*Willard R. Faulkner, Ph.D., VU

56, Emeritus Professor of Biochemistry, died April 7. His major research interest was in the development and evaluation of new techniques of clinical chemistry and their significance to clinical evaluation of health status. He spent several years at the Cleveland Clinic and returned to Vanderbilt in 1968 as a member of the Biochemistry Department and an associate professor of Biochemistry. His many duties included acting director of Clinical Laboratories, director of the Clinical Chemistry Laboratories, and director of Research and Development in Clinical Chemistry. In 1980, he became a Professor of Biochemistry. Dr. Faulkner is preceded in death by his wife, Louise, and is survived by his sister, Louise, and his brother, Donald.

Robert B. Fisher, M.D., died May 4 in Portland, Maine. He was 74. He served in the U.S. Air Force during the latter part of the Korean War. Dr. Fisher earned a master's degree in Public Health from the University of Washington. From 1992-1997 he was employed by Vanderbilt University School of Medicine serving as medical director for the Tennessee Department of Mental Health and Mental Retardation, and from 1998- 2006 by Tulane University's Medical School as medical director for the Louisiana Office of Mental Health. Most recently he was employed by the Dartmouth Medical School working at the Riverview Hospital in Augusta as a Forensic Psychiatrist. Dr. Fisher is survived by his wife, Diane; daughter, Chloe; two step-sons, Nicholas and Daniel; and a stepgrandson.

Samuel H. Hay Sr., M.D., MD '40, died Feb. 15. He was 96. He served in the U.S. Army and was honorably discharged as a Major. In 1950, Dr. Hay returned to Murfreesboro, Tenn., to private practice and was former president of the hospital staff at Middle Tennessee Medical Center. In 1981, he completed the Preceptorship



Robert A. Neal, Ph.D., VU '63, died March 3. He was 82. He served on active duty with the U.S. Air Force for 10 years. Upon graduating from Vanderbilt, he undertook a post-doctoral year at the University of Chicago in the research specialty of toxicology. He returned to Vanderbilt where he continued his research in toxicology and was a member of the teaching faculty of the medical school. During his tenure at Vanderbilt, he served on a number of committees for the federal government, academic institutions and industry. In

1981, he became the president of the Chemical Industry Institute of Toxicology (CIIT) in the Research Triangle Park, N.C. This institution conducted research into the possible harmful properties of industrial chemicals. He retired from CIIT in 1988 and returned to Vanderbilt University where he was awarded the title of Professor Emeritus. Dr. Neal was preceded in death by his son, Paul. He is survived by his wife of 52 years, Patricia; daughters, Julie and Stacey; and five grandchildren. Program in Nuclear Medicine at Vanderbilt University. For the past five years, Dr. Hay had lived in a retirement home in Huntsville, Ala. He was preceded in death by his wife, Katheryn, and a daughter, Sarah. He is survived by children, Samuel, Mary and Katheryn; 13 grandchildren; and two greatgrandchildren.

Joel Levinson, M.D., HS '68, died Feb. 3. He was 72. He served in the U.S. Air Force during the Vietnam War. He later opened a practice in Mountainside, N.J., and worked at Overlook Hospital, where he served as chief of Gastroenterology, chief of Medicine, vice president and then president of the medical staff at the hospital. Outside of medicine, Levinson was an avid sports fan, particularly baseball and long-distance running. Dr. Levinson was predeceased by his son, Kipp, and is survived by his wife, Bobby; children Marcy and Dana; and nine grandchildren.

Robert J. Maciunas, M.D., FE '88, FAC '87-'89, died March 1. He was 55. He joined Vanderbilt University in 1986 and directed a brain tumor clinic and a surgical program here. He also became chief of Neurosurgery at Nashville's VA Hospital and led work to use imagery to guide surgery, a common practice today. In 2004, he became the first surgeon in North America to implant a deep brain stimulator to treat Tourette's syndrome. He was vice chair of Neurological Surgery at Case Western Reserve University and director of programs at University Hospitals Case Medical Center. He is survived by his wife, Ann Failinger, M.D., and children, Nicholas and Joseph.

William R. Nelson, M.D., HS '46, died Dec. 31, 2010. He was 89. He graduated from the University of Virginia School of Medicine, and served as an Army Air Force doctor in California, Hawaii, Virginia, and Japan. A fourth-generation physician, he specialized in cancer surgery. He taught surgery at both the Medical College of Virginia (1958-1962) and the University of Colorado School Of Medicine (1955-1957 and 1962-1987). Dr. Nelson traveled the world and was a student of history. He was predeceased by his son, John, and is survived by his wife, Pamela; children, Robin, Kim and Anne; stepdaughters, Heather, Sharon and Melinda; and six grandchildren.

Robert E.L. Nesbitt Jr., M.D., MD

'47, died May 25. He was 86. He served as professor of Medicine 36 years, 24 of those at State University of New York Health Science Center at Syracuse as professor and chairman, retiring as professor emeritus. Prior to that, he served as professor and chairman, Department of Obstetrics and Gynecology, Albany Medical College of Union University; professor of Surgery, University of South Florida at Tampa; and chief of Gynecology and assistant chief (also acting chief) of Surgery, Veterans Administration Hospital at Bay Pines, Fla.

Yeshawant B. Paranjape, M.D.,

FAC '82-'00, died Jan. 9. He was 76. He practiced Ophthalmology in Hermitage, Tenn., for 28 years. He is survived by his wife, Pushpa; and children, Sachin and Shefalie.

Milton B. Peeler, M.D., MD '53, HS '56, died March 18. He was 84. He served two years in the U.S. Army Air Forces during and after World War II. Following internship and residency at Vanderbilt, Dr. Peeler returned to Huntsville, Ala., in 1956 to establish his practice. For a time he was Huntsville's only pediatrician. He and Dr. Richard Lester formed Huntsville Pediatric Associates, where he practiced until his retirement in 1988. He is survived by his wife of 61 years, Betty; children, Patricia, David, Virginia, Betty and Sarah; and six grandchildren.

*Julia E. Sawyers, M.D., MD '60, HS '64, died Jan. 1. She was 79. Dr. Sawyers grew up in Nashville and graduated from Randolph Macon College in 1952. Following graduation, she worked in the clinical laboratory at Johns Hopkins medical school. She was one of four women in her class at Vanderbilt Medical School. A founding partner in the Anesthesia Consultants of Nashville, she practiced until her retirement to Mountain Lake, Fla. Dr. Sawyers is survived by her husband of 53 years, John L. Sawyers, M.D., former chair of the Department of

Surgery at Vanderbilt; children, Charles, Al and Julia; and eight grandchildren.

Winborn B. Willingham Jr., M.D.,

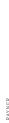
HS '70, died Jan, 19, He was 72, He graduated from the University of Tennessee Medical School in Memphis. He began his surgical practice in Urology in 1970 and continued until 1986 in Chattanooga, Tenn. Although his primary hospitals of practice were Erlanger, Memorial and Park Ridge, Dr. Willingham had hospital privileges at every hospital in the city. He is survived by his wife, Shirley; children, Winborn, Tatia and Anthony; stepdaughters, Christina and Jean; seven grandchildren; and five stepgrandchildren.

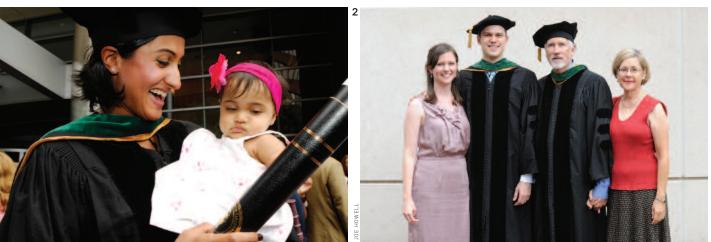
Leon P. Woods Jr., M.D., HS '64, died Jan. 2. He was 78. Dr. Woods graduated from the University of Oklahoma School of Medicine in 1956. He served from 1956 to 1959 in the U.S. Public Health Service, including an internship at the Marine Hospital in San Francisco and service at the Indian Hospital in Claremore, Okla., with the rank of senior assistant surgeon. He served as chief resident in thoracic and cardiac surgery at Vanderbilt. In 1966, Dr. Woods joined Holt Krock Clinic in Fort Smith, Ark., until retirement in 1992 and participated in the development of the cardiac surgery program at Sparks Regional Medical Center. He is survived by his wife, Ann; children, Nancy, Julie, Evelyn and James; and seven grandchildren.



Jo; and children, Drisana and Jivin.

Vijay Misra, M.D., FE '93, died June 4. He was 51. Dr. Misra was a professor of Medicine and director of the cardiac catheterization lab at the University of Alabama-Birmingham. He also held faculty appointments in the Department of Neurology and the Comprehensive Diabetes Center. Prior to joining UAB Dr. Misra was an assistant professor of Medicine and director of Interventional Cardiology at Vanderbilt. He is survived by his wife, Mary nd Jivin.





3

1) Yamini Rao, M.D., shows her diploma to her 8-month-old niece, Manisha Nilakantan.

2) Graduate Billy McSwain, M.D., is flanked by his wife Mary Beth, MDiv '10, his father George, BA '70, MD '74, and his mother Susan, BA '72. Billy McSwain is the first fifth-generation legacy graduate. His grandfather, greatgrandfather and great-great-grandfather and a great uncle all graduated from VUSM.

3) Marlon Joseph, M.D., left, and Luke Laffin, M.D., eagerly await the ceremony in Langford Auditorium.

4) Caitlyn Mooney, M.D., celebrates after receiving her diploma from VUSM.

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> **"Thanks to my scholarship,** I can cover the cost of tuition without having to apply for private educational loans. It makes a big difference."

> > —Jolene Mariotti, Vanderbilt University School of Medicine Class of 2012

Robert Rosenfeld, MD'94, has maintained his family tradition—as both a doctor and a supporter of the Helen and Louis Rosenfeld Endowed Scholarship Fund, established by his parents in 1994. Today, Rosenfeld and his wife, Rebecca, are helping two Vanderbilt University School of Medicine students, Jolene Mariotti, Class of 2012, and Mi Jin Yoo, M.D., Class of 2011.

"Medical education is extraordinarily dear, and whatever help we can give is worthwhile," Rosenfeld says. "Remembering why I went into medicine in the first place makes me want to support the next generation of physicians."

> To make a difference to a student, visit www.vanderbilthealth.org/givetomedicine or contact Mary Beth Thompson at mary.beth.thompson@vanderbilt.edu or (615) 322-8846.

Jolene R. Mariell VANDERBILT SCHOOL of MEDICUE