Surgery and Engineering collaborate to improve surgical outcomes

In 2010, physicians and engineers at Vanderbilt wondered what patient care would look like if the two groups could work together to improve surgical outcomes.

Just two years later, the Vanderbilt Initiative in Surgery and Engineering (VISE) is developing new technologies, including tiny surgical robots, that one day may make surgeries less invasive and more precise.

“VISE is a critical mass of Vanderbilt-dedicated and futuristic surgeons, established engineers and enthusiastic computer scientists all looking for innovations that create the operating rooms and surgical technologies of the future,” said Duke Herrell, M.D., VISE Steering Committee member and associate professor of Urologic Surgery and Biomedical Engineering.

One of the first of its kind in the U.S., VISE formalizes collaboration across many disciplines to engineer solutions that make surgery safer and more successful for the patient.

Already, the group is perfecting several new image-guided technologies that will enable surgeons to more clearly see critical structures as blood vessels and nerves, using the smallest of incisions along with new platforms for robotic surgery for brain, ear, oral and urologic surgery.

On Dec. 12, Vanderbilt hosted the 1st Surgery & Engineering Symposium and poster session to showcase the innovations coming from VISE, as well

(Continued on page 6)
common in developing countries and the cause of one-third of all deaths in children under the age of five.

“Proper nutrition during pregnancy and in early childhood dramatically improves children's health and quality of life for years to come,” said Pietsch, associate professor of Surgery and Pediatrics. “By detecting malnutrition in infants and children before it is obvious gives us a head start to reverse these negative effects well into adulthood and even across generations.”

So, Pietsch, Allen and Eric-Jan Manders of the Centers for Disease Control and Prevention teamed with the department of Biomedical Engineering and the Vanderbilt Institute for Global Health to begin work on a handheld instrument that can provide early detection of malnutrition, as well as analyze follow-up treatment efficacy.

The Biomedical Engineering team, consisting of Franz Baudenbacher, Ph.D., Andre Diedrich, Ph.D., Rene Harder, M.Eng., and Jonathan Whitfield, M.Eng., are beginning work on a low-cost, rugged and check-card sized mobile device that measures bioelectrical impedance.

Using Vanderbilt's existing Smart Health Care Technology Platform, this device might one day be used to determine body water and overall body composition, as well as plot and analyze changes in nutrition following nutritional support.

Bioelectrical impedance analysis (BIA) is a technique developed in the 1980s to determine body composition by measuring the flow of an electric current through body tissues.

Pietsch and colleagues hope to improve upon this technique, enabling healthcare providers to interpret and adapt treatment at the point of care – even in rural or remote areas.

“Smart and mobile technologies are currently underutilized and provide a cost-effective opportunity to access and improve healthcare, as well as enable more independent living,” said Baudenbacher, associate professor of Biomedical Engineering and Physics.

“It is a tremendous accomplishment to receive funding from the Gates Foundation, and we are excited about the potential to positively impact global health,” said Dai H. Chung, M.D., professor and chair of Pediatric Surgery.

Grand Challenges Explorations is a $100 million initiative funded by the Bill & Melinda Gates Foundation. Launched in 2008, over 700 people in 45 countries have received the grants. Successful projects have the opportunity to receive a follow-on grant of up to $1 million.

Beauchamp, Vermund elected to Institute of Medicine

by Bill Snyder, The Reporter

R. Daniel Beauchamp, M.D., chair of the Section of Surgical Sciences, and Sten Vermund, M.D., Ph.D., director of the Vanderbilt Institute for Global Health, have been elected to the Institute of Medicine (IOM).

With more than 1,900 members, the IOM is the health arm of the National Academies, serving as an adviser to the nation to improve health and promote health-related research.

The National Academies, which also includes the National Academy of Sciences (NAS), National Academy of Engineering (NAE) and National Research Council, are private nonprofit institutions that provide advice on some of the most pressing challenges facing the nation and the world.

Vanderbilt University now has 25 current faculty members who have been elected by their peers to the National Academies in recognition of excellence in their fields. Eighteen are members of the IOM; seven others are members of the NAS or NAE.

“Election into the IOM serves as acknowledgment for those who demonstrate outstanding achievement in their disciplines while also exhibiting continued service to the advancement of medicine and science,” said Jeff Balser, M.D., Ph.D., vice chancellor for Health Affairs and dean of Vanderbilt University School of Medicine. “The election of Drs. Beauchamp and Vermund reflects their sustained track record of contributions and steadfast commitment to their fields of endeavor.

“With their election, Vanderbilt continues to experience a steady annual increase in faculty becoming members of the National Academies, signaling our growing impact on the national stage,” Balser said.

Also among the 70 new IOM members announced this week is Wayne Riley, M.D., MPH, MBA, professor of Medicine in the Vanderbilt University School of Medicine, secondary to his primary appointment as president and chief executive officer for Meharry Medical College.

Both an honorific membership organization and an advisory organization, the IOM was established in 1970 by the National Academies and is recognized as a national resource for
For South Texas native Erik Hansen, M.D., home has always been where the heart is. So, for Hansen, his wife and four small children, Africa has become home.

Hansen will return to the States in March for a few months following a two-year stint at AIC-Kijabe, a tertiary-care mission hospital in Kenya, which treats patients throughout the region.

Hansen’s hybrid appointment, which has him practicing in both Africa and the United States, is an emerging model for academic physicians with global health interests.

“My faith instructs my decisions and fuels the work here,” said Hansen, who holds joint faculty appointments in Pediatric and General Surgery, and serves as associate program director for the General Surgery Residency with responsibility for the Vanderbilt International Surgery initiative.

“My family and I feel very blessed to live and work in Kenya. This is so much more than just a job; it’s a calling.”

Hansen’s practice is similar to those of an attending in the United States and includes “typical” pediatric general surgery, pediatric urology, some adult general surgery and cleft lip and palate repairs.

One significant difference, however, is that because of the limited access to health care in the region, patients often present at much later stages in their illnesses.

“We see complications, infections and end-stage presentations here that we almost never see in the United States because so many East Africans simply can’t get to a doctor sooner,” said Hansen, who received his Master of Public Health from Vanderbilt in 2006.

“We working here provides the opportunity to care for the vulnerable and train surgeons for future generations. It’s why I’m here.”

Hansen and his family live in a mission compound with families from all across the globe. His wife Amanda teaches at a Bible college and holds down the fort with three children in school and a four-year-old still at home.

“Our kids seemed to adapt to life in East Africa almost from the moment our plane landed,” said Hansen.

“Life is a lot simpler here. They walk to school; I walk to work, and everyone knows everyone. You might compare it to a small town in America in the 1950s.”

Hansen and his family expect to return to Kenya in August. “Kenya is our home, and this is where we are supposed to be,” he said.
Vanderbilt ECMO life-support program lauded again

For the third straight time, Vanderbilt’s heart and lung life-support program has received the ELSO Award for Excellence in Life Support by the Extracorporeal Life Support Organization (ELSO).

Extracorporeal Membrane Oxygenation, or ECMO, is a life-support system that oxygenates the blood through a machine that then returns the oxygenated blood back into the body either through the arteries or veins.

The mobile machine is used both in and outside of the operating room and can support vital heart and lung function for weeks at a time until organ function is returned.

Since 1989, Vanderbilt has treated more than 850 patients whose heart or lungs were failing and were at considerable risk of dying.

ECMO is particularly effective in term- and near-term infants with respiratory failure or congenital heart disease, by providing a crucial interim cardiopulmonary support both before and after surgery is performed. ECMO is also used in some adult patients with respiratory failure who do not respond to conventional management.

“ECMO has literally turned the tables on survival for these critically ill patients,” said John Pietsch, M.D., surgical director of ECMO services at Vanderbilt and associate professor of Pediatric Surgery and Pediatrics. “What was once a 70 percent likelihood of dying is now nearly a 70 percent chance for survival.”

One of the largest services of its kind in the nation, the ECMO team at the Monroe Carell Jr. Children’s Hospital at Vanderbilt consists of a broad array of specialists, including nurses, respiratory therapists, pharmacists, nutritionists, and intensive care unit physicians and surgeons.

“It is an honor to work with such an accomplished team of ECMO specialists,” said Daphne Hardison, R.N., ECMO manager at Children’s Hospital. “Families often comment on the compassion, professionalism and working knowledge the team shows at the bedside.”

Vanderbilt also serves as a key referral destination for patients throughout the entire southeastern United States.

The ELSO designation as a center of excellence is awarded only to those ECMO services that reach the highest level of performance, innovation, satisfaction and quality. The ELSO Award of Excellence is recognized by the U.S. News & World Report and Parents magazine as one of the criteria used in ranking top institutions.

“We are so proud of our ECMO program, led by Dr. Pietsch and his team of outstanding specialists,” said Dai H. Chung, M.D., chairman of the department of Pediatric Surgery. “Their work has led to our program being recognized as one of the best in the country.”

ELSO is an international consortium of healthcare professionals and scientists dedicated to the development and evaluation of new therapies for supporting failing organ systems.

4th year resident receives prestigious outstanding resident teacher award

Fourth year resident Andrew Murphy, M.D., was recently honored with the Association for Surgical Education's Outstanding Resident Teacher award.

Each year, the ASE selects only up to four residents who are actively involved in surgical education and considered by their faculty and peers to be an outstanding teacher.

Kyla P. Terhune, M.D., associate program director of the General Surgery Residency, nominated Murphy for the award, noting his commitment to skills and simulation training.

Murphy also trains first year surgical and anesthesiology residents.

“Andrew is an exemplary teacher at the individual level, and we had several residents attest to this in his nomination packet. But he also contributes to and improves sustainable curriculum for the program, making this an easy letter to write,” said Terhune.

In bestowing the award, ASE Awards Committee Chair Maura Sullivan, Ph.D., said, “We are pleased to recognize your teaching with this award. We had numerous outstanding candidates this year and the committee was very impressed with your accomplishments.”

To receive an Outstanding Teacher Award, nominees must demonstrate:

- Commitment to teaching
- Knowledge and resourcefulness in acquiring knowledge
- Encouragement of problem solving
- Ability to provide feedback and effective evaluation
- Role modeling of professionalism
- Approachability
- Openness to new ideas.
Each year, just as the leaves begin to change, Vanderbilt begins the fall season with a flurry of events and lectures honoring the legacy of those whose work continues to lay the foundation for future surgical achievements.

In October, the Section of Surgical Sciences hosted Douglas B. Evans, M.D., chairman of the Department of Surgery at the Medical College of Wisconsin, as this year’s guest lecturer for the 34th Annual Leonard W. Edwards Lecture.

The Edwards Lecture was established by family and friends of the late Dr. Edwards, one of Vanderbilt’s earliest pioneers in surgery who earned his medical degree here in 1912.

His grasp of complicated gastrointestinal surgical conditions inspired both students and residents, alike.

In November, the department of Pediatric Surgery welcomed Thomas F. Tracy Jr., M.D., surgeon-in-chief at Hasbro Children’s Hospital in Providence, R.I., as this year’s guest lecturer for the 20th Annual George W. Holcomb Jr. Lecture in Pediatric Surgery.

The Holcomb Lecture Series was established in 1990 to recognize the medical and surgical contributions of Dr. Holcomb, who graduated from the Vanderbilt School of Medicine in 1946 and dedicated his career to pediatric surgical patients in the middle Tennessee region for more than 30 years.

And in December, the Department of Thoracic Surgery hosted the 34th Annual Rollin A. Daniel Jr., M.D. Lecture.

Professor Peter Goldstraw, M.B., F.R.C.S. (Eng), FETCS, Honorary Consultant in Thoracic Surgery at Royal Brompton Hospital, presented this year’s lecture.

The Rollin Daniel Lecture Series was established in 1977 to recognize the medical achievements of Dr. Daniel who graduated from the Vanderbilt School of Medicine in 1933 and was known as the “father of thoracic surgery in the Nashville surgical community.”

“This academic year has seen an outstanding series of invited, internationally renowned surgical leaders for these prestigious named lectures,” said R. Daniel Beauchamp, chairman of the Section of Surgical Sciences and the Foshee Distinguished Professor of Surgery.

2012 Edwards Lecturer Douglas B. Evans, M.D. (center left) is joined from left to right by Alexander Parikh, M.D., R. Daniel Beauchamp, M.D., and William H. Edwards, Jr., M.D., M.B.A.

2012 Rollin Daniel Lecturer Peter Goldstraw, M.B., F.R.C.S., (center right) is joined from left to right by Robert B. Lee, M.D., Joe B. (Bill) Putnam, Jr., M.D., Eric L. Grogan, M.D., M.P.H., Eric S. Lambricht, M.D., and Jonathan C. Nesbitt, M.D.

George W. Holcomb Jr., M.D. (seated) is joined by faculty and residents of the Department of Pediatric Surgery and 2012 guest lecturer Thomas F. Tracy, Jr., M.D. (center left)

See story on the first annual Scott Society Lecture on page 7.

Innovations in Surgery is produced quarterly by the Section of Surgical Sciences.

R. Daniel Beauchamp, MD, Chairman and the Foshee Distinguished Professor of Surgery

Send story ideas or suggestions to mimi.a.eckhard@vanderbilt.edu, (615) 322-4625.

Mimi Eckhard, director, media services
Emily Goad, media services specialist
www.mc.vanderbilt.edu/surgicalsciences
as encourage others to think more collaboratively.

“Vanderbilt is a vibrant place for interdisciplinary work. More than 30 posters were presented on research ranging from basic device and algorithm development to system integration to clinical translation. The exciting thing is that most of the research projects involve teams of engineers, computer scientists and physicians. We hope that this symposium will trigger ideas for new collaborative efforts,” said Benoit Dawant, Ph.D., director of VISE.

The symposium was jointly hosted by VISE and the Department of Surgery Research Collaborative, which meets monthly to bridge the efforts of Basic Sciences and Clinical Research.

Reed Omary, M.D., professor and chairman of Radiology and Radiological Sciences, was the keynote speaker, discussing the opportunities for image-guided drug delivery in the treatment of cancer.

Faculty, staff and residents from Engineering and Surgery participated in the symposium and corresponding poster session.

“We’re thrilled to be working together with VISE to promote stimulating forums for bright minds to come together and solve important medical challenges,” said Natasha Deane, Ph.D., associate professor of Surgical Oncology, who established the Surgery Research Collaborative.

Institute of Medicine... (Continued from page 2)

independent, scientifically informed analysis, providing recommendations on a broad range of health issues.

“It is a distinct honor to join the group of outstanding Vanderbilt University colleagues who have been elected into the IOM and other National Academies,” said Beauchamp, the John Clinton Foshee Distinguished Professor of Surgery.

“I am extremely grateful to my mentors and my many colleagues and collaborators here at the Vanderbilt University Medical Center for their support and for the opportunities that have culminated in this recognition.”

“It is always an honor to be recognized by one’s peers,” said Vermund, the Amos Christie Professor of Global Health.

“That IOM members would elect a prevention scientist focusing on challenges of low income nations suggests a growing appreciation for quality improvement research.”

Beauchamp is professor of Surgery, Cancer Biology and Cell & Developmental Biology, Surgeon-in-Chief of Vanderbilt University Hospital, deputy director of the Vanderbilt-Ingram Cancer Center (VICC) and a project leader in Vanderbilt’s Gastrointestinal Cancer Specialized Program of Research Excellence (SPORE) grant from the National Institutes of Health (NIH).

In addition to an active clinical practice emphasizing the care of breast cancer patients, Beauchamp’s research interests include colorectal carcinogenesis, the biology of cancer cell invasion and metastasis, and identifying novel molecular biomarkers and therapeutic targets in colorectal and other alimentary tract malignancies.

After completing his medical degree and surgery residency at the University of Texas (UT), Beauchamp came to Vanderbilt in 1987 to work with internationally known cancer researcher Harold L. Moses, M.D.

He then spent several years on the faculty at the UT Medical Branch in Galveston, before returning in 1994 to Vanderbilt, where he was founding chief of the Division of Oncologic and Endocrine Surgery.

Beauchamp is a fellow of the American College of Surgeons, a member of the American Society of Clinical Investigation and a former president of the Society of University Surgeons. He has served on the editorial boards of several scientific journals.

Vermund is professor of Pediatrics, Preventive Medicine, Medicine and Obstetrics & Gynecology. He has led international HIV treatment and prevention projects in several countries, and has spearheaded efforts to ease the burden of tropical and childhood diseases.
When Sunil Gevarghese, M.D., president of the H. William Scott, Jr. Society, was planning the first Annual Scott Society Lecture he knew he had to select a speaker whose own passion for surgical care and education mirrored that of Dr. Scott.

For the Executive Council of the Scott Society, it was an easy decision. Since joining the faculty in 1993, and even before as a Vanderbilt medical student, John L. Tarpley, M.D., has become synonymous with the Vanderbilt surgical residency.

“What I find most remarkable about Tarp (as he is known) is not simply his prodigious love for surgical teaching, it’s the personal connection he makes with every patient, every resident,” Gevarghese said. He makes clear that his most fond ‘fourth’ child are the Vanderbilt residents.”

In his presentation, Tarpley chronicled the most important scientific achievements of the last 200 years without which modern surgery would not be possible, including non-surgical technologies we now take for granted – climate control, transportation, personal computers and electricity.

From these now seemingly basic amenities, five foundational discoveries in medicine laid the groundwork for 21st century surgery – anesthesia, antisepsis, imaging, blood transfusions and antibiotics.

In 1846, the first of these landmark innovations was the use of inhaled ether as a form of anesthesia. The operation, performed in the Ether Dome at Massachusetts General Hospital, was of no small consequence as the surgeons were removing a carotid body tumor.

The patient awoke following the surgery saying, “I don’t think I can go through with this.” News of this technique took off like wildfire and commenced the worldwide use of anesthesia in surgery in a matter of just three weeks.

In 1867, Sir Joseph Lister published a paper advocating the use of antiseptics to sterilize surgical instruments and clean wounds to prevent the spread of infection during operations.

Though his efforts ultimately led to the use of antisepsis and antiseptics during operative procedures and in the treatment of wounds and injuries, a 20-year debate ensued on the necessity of “Listerism.” German surgeons were the first to embrace antisepsis as early as 1875.

In 1895, Wilhelm Conrad Roentgen became the father of imaging when he took the first x-ray, an image of his wife’s hand. From this pioneering effort was born CTs, PET scans and MRIs. In 1901, Roentgen won the first Nobel Prize for his work in this area.

At the same time, Karl Landsteiner, an Austrian biologist and physician led the world to the next scientific achievement that would forever change surgery. From his discovery of the major blood types, the process of transfusion was born in the first decade of the 20th century.

And finally, in 1929, Sir Alexander Fleming, a surgeon, published his observations on the mold *penicillium notatum*. A few years later in the 1930s, Florey, Chain and Heatley et al. discovered penicillin, which was not produced in real quantity until World War II. Florey, Chain and Fleming received the Nobel Prize in 1945 for their work on penicillin and the introduction of antibiotics.

These advances, half of which occurred well after the first medical degree was conferred at Vanderbilt in 1874, changed both surgery and surgery education in ways that still impact surgeons and residents today.

Perhaps future innovations being explored today, including personalized medicine, robotic surgery, and regenerative medicine and tissue engineering, will too become known as foundational discoveries in the continued evolution of surgery.

The First Annual Scott Society Lecture was sponsored by Vanderbilt University Medical Alumni Affairs, under the direction of Associate Dean Ann Price, M.D. The standing-room only event was part of the 2012 Vanderbilt Medical Alumni Reunion.

The First Annual Scott Society Lecture in Surgical History will take place annually to commemorate the seminal contributions of Dr. Scott to Vanderbilt’s ongoing leadership in surgical excellence, clinical care, teaching and research.
Putnam, Merrill elected to American Board of Thoracic Surgery

The American Board of Thoracic Surgery announced it has elected two Vanderbilt surgeons to its 17-member board of directors.

Joe B. (Bill) Putnam Jr., M.D., chair of Thoracic Surgery, and Walter H. Merrill, M.D., professor of Cardiac Surgery, were appointed six-year terms, effective through 2018.

“Election to any of the Boards of Medical Specialties is truly a high honor and a reflection of recognition of excellence by one’s professional peers,” said R. Daniel Beauchamp, M.D., chair of the Section of Surgical Sciences. “For Drs. Merrill and Putnam to be elected to occupy two of the 17 director positions is an exceptional accomplishment. This reflects the strong national reputation of our outstanding programs in Cardiac Surgery and Thoracic Surgery.”

The American Board of Medical Specialties, which now represents 24 broad areas of medical specialties, including thoracic surgery, was formed in 1933 to establish and maintain high standards in surgery and promote lifelong learning.

“It is a great privilege to serve in this role,” said Putnam. “With more than 4,000 cardiothoracic surgeons in the U.S., ensuring consistently high quality care and outcomes is truly a matter of fulfilling public trust.”

“It is an honor and a privilege to be selected as a member of the American Board of Thoracic Surgery. I look forward to working with other members of the Board to promote effective, safe and ethical thoracic surgery practice and to help maintain high standards of education and training,” said Merrill.

Putnam is the Ingram Professor of Cancer Research, program director of resident education in Thoracic Surgery and professor of Biomedical Informatics.

Before coming to Vanderbilt in 2004, Putnam served as deputy chairman and professor of Thoracic and Cardiovascular Surgery at the MD Anderson Cancer Center in Houston. He is also a retired captain of the Medical Corps of the United States Naval Reserve.

Merrill is chief of staff of Vanderbilt University Hospital. He was recently elected Governor of the American Association for Thoracic Surgery. He came to Vanderbilt in 1983 as assistant professor of Surgery in the then-combined department of Cardiac and Thoracic Surgery, ultimately serving as the department’s interim chair and chief of Surgical Service at the Department of Veterans Affairs Nashville Medical Center.

Before returning to Vanderbilt in 2012, Merrill served as chief of Cardiothoracic Surgery at the University of Cincinnati Medical Center and the University of Mississippi Medical Center.

Prospective residents tour Surgery program at Vanderbilt

Each year, throughout the month of December, the Section of Surgical Sciences hosts approximately 75 prospective residents from across the country, showcasing the benefits of a Vanderbilt surgical residency.

This year was no exception. Prospective residents had an opportunity to see Vanderbilt on and off campus, catching a glimpse of a program steeped in academic rigor and collegial spirit.

Associate Program Director of the General Surgery Residency Kyla P. Terhune, M.D., presented a basic framework of the program, as well as opportunities afforded to residents through its association with a nationally renowned medical center and its affiliate centers throughout middle Tennessee.

And Chief Resident Rondi Kauffmann presented a bit of the program’s personality, providing a snapshot of resident life at Vanderbilt.

“This is, of course, one of the most important aspects to our year, in some ways incredibly daunting and inspiring also as we read through the folders and meet these remarkably talented individuals,” said Terhune, assistant professor of Surgery and Anesthesiology in the division of General Surgery.
March

March 15
6th Annual Robert S. McCleery Master Teacher Award and Surgical Resident Education Lecture -- 7 to 8 a.m., 208 Light Hall, VUMC.

Match Day for School of Medicine students.

April

April 5
The Charles J. Thuss Lecture in Plastic Surgery -- 7 a.m., 208 Light Hall, VUMC. The series will continue through Saturday.

April 19
The 13th Annual H. David Hall Lecture -- 7:30 a.m. to Noon, Children’s Theater of the Monroe Carell Jr. Children’s Hospital at Vanderbilt. Ole Jensen, D.D.S., M.S., is this year’s guest lecturer. He is in private practice with the Cody Dental Group in Denver, CO., and is clinical assistant professor at the University of Colorado School of Dentistry and is clinical professor at New York University.

April 26
The 21st Annual W. Andrew Dale Lecture -- 7 to 8 a.m., 208 Light Hall, VUMC. Hazim J. Safi, M.D. professor and chair of Cardiothoracic and Vascular Surgery at The University of Texas Medical School at Houston, will present this year’s lecture.

April 27
The 5th Annual Thoracic Symposium 5-6 p.m., Hyatt Place Nashville/Brentwood, TN. Go to www.mc.vanderbilt.edu/thoracicsurgery.com for more information.

May

May 9
School of Medicine Class Day -- 4 to 5:30 p.m., Langford Auditorium, VUMC.

May 10
The 55th Barney Brooks Lecture -- 7 to 8 a.m., 208 Light Hall, VUMC.

Vanderbilt University School of Medicine Commencement -- All day, Light Hall, VUMC.

Section Events

CALENDAR

Calendar Submissions
If you would like to add a lecture or event to our calendar please send them to:
mimi.a.eckhard@vanderbilt.edu
(615) 322-4625

New to the Section

The Section of Surgical Sciences welcomes its newest additions and congratulates faculty on their latest appointments.

Lola B. Chambless, M.D., is assistant professor in the department of Neurological Surgery. She completed her residency in Neurological Surgery and fellowship in Neurosurgical Oncology at Vanderbilt. She just completed a specialized fellowship in minimally invasive neurosurgical oncology at the Centre for Minimally Invasive Neurosurgery in Australia.

Matthew Mizukawa, D.M.D., joins the department of Oral and Maxillofacial Surgery as assistant professor. He comes from a private practice in St. George, Utah, and completed his residency at Vanderbilt in 2011.

J Mocco, M.D., associate professor of Neurological Surgery and Radiology and Radiological Sciences, has been appointed Director of the Vanderbilt Comprehensive Neuro-interventional Service (CNS). He will lead a team of nurses, physicians and staff in building a nationally recognized program.
Our 2012-2013 Chief Residents in General Surgery

Walter Schratt, M.D.,
Robert Yates, M.D.,
Stephen Poteet, M.D.,
Julia Shelton, M.D., M.P.H.,
Matthew Landman, M.D., M.P.H.,
Sina Iranmanesh, M.D.,
Josh Smith, M.D., Ph.D., and
Rondi Kauffmann, M.D., M.P.H.