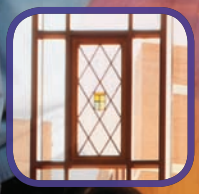
UAB MEDICINE

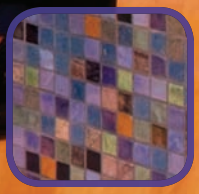
A Magazine for Alumni and Friends of the School of Medicine

Volume 36 • Number 1 • Spring/Summer 2010

Rebirth

Ob/Gyn Enters a New Era





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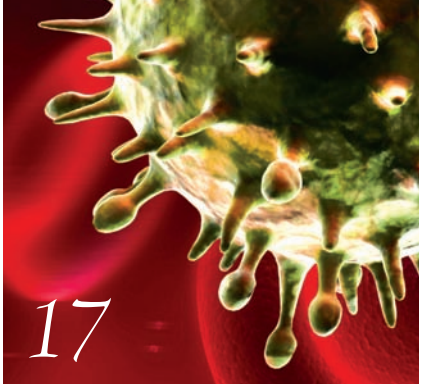
Cover Stories

Photos courtesy of Cayenne Creative

On the Cover

(Left to right) Women and Infants Services administrative director Elicia Daley; neonatology director Wally Carlo, M.D.; and UAB ob/gyn department chair William Andrews, M.D., visit the Regional Newborn Intensive Care Unit, a centerpiece of the new Women & Infants Center.

Features



Departments

WEB EXCLUSIVE: Medicine.uab.edu/magazine

Alumni Profile: Charles Butler, M.D.
Step into the ring with one of boxing's top doctors.

Dean's Corner

Dear Colleagues:

If you've not recently visited the Birmingham campus, I urge you to head straight for the corner of 18th Street South and 6th Avenue South the next time you're in town. I think the first word that will come to mind is "Wow!" At least that was my impression the first time I had an opportunity to tour our two newest clinical facilities—the Women & Infants Center and the Hazelrig-Salter Radiation Oncology Center. Together they occupy the full city block north and west of that corner and soar 10 stories high. And they represent our continuing determination to develop patient-friendly facilities with clinical-care capabilities that are second to none. In short, we now offer hospital facilities for the comprehensive care of women and newborn babies and for state-of-the-art radiotherapy of cancer patients that are in every way commensurate with the personal care and clinical skills of our faculty and staff. From uncomplicated labor and delivery to the most complex, high-risk pregnancy and premature birth, we can now offer clinical care of the utmost sophistication in a setting with the amenities of a fine hotel. And for cancer patients, our outstanding therapy facilities assure maximally effective treatment while minimizing the side effects of radiation to normal tissues.

If you sense that I'm proud of these stunning new additions to our campus, you're correct! I hope you'll stop by for a visit at your first opportunity.

And while we're being proud, let's collectively bask in the reflected glory of our alumna Regina Benjamin, M.D., class of 1984, now the 18th surgeon general of the United States. Many of us thoroughly enjoyed her first formal address in Alabama since her appointment when she delivered the annual Constance S. and James A. Pittman, Jr., Lecture at the meeting of the Medical Alumni Association in February. As a leader of American medicine and a tireless advocate for the medically underserved, Dr. Benjamin has led by example throughout her distinguished career—with selflessness, determination, compassion, and intelligence. She is truly a role model for medical students and physicians everywhere. Surgeon General Benjamin, we wish you a most successful tenure as America's "top doctor."

My best to all of you,

Bob Rich

News Digest

Clinical Trials:

Alabamians who want to participate in research studies can connect with investigators through ResearchMatch.org, the first national, disease-neutral volunteer-recruitment registry. UAB and 51 other institutions nationwide are participating in the new, not-for-profit Web site, which provides volunteers with a secure, easy-to-use tool to find studies that fit them—and help researchers locate enough people to complete their work. The Clinical and Translational Science Awards Consortium, led by the National Institutes of Health, organizes the site. Visit ResearchMatch.org to learn more.

Adolescents/Young Adults:

Physicians should look beyond group A streptococcal bacteria when diagnosing and treating pharyngitis in young people, says new UAB research. Robert Centor, M.D., associate dean of medicine and lead author, says that "*Fusobacterium necrophorum*, recognized as a potential cause of pharyngitis in adolescents and young adults in the past five years, may cause up to 10 percent of sore throat in those 15 to 24 years of age." The infection is associated with Lemierre syndrome, a rare, life-threatening complication that transitions from a sore throat to an infected jugular vein and abscesses. Centor adds that physicians should consider *F. necrophorum* if the sore throat does not improve within three to five days and if Lemierre symptoms, including unilateral neck swelling, rigors, night sweats, and high fever, appear.

Dystonia:

UAB's Center for Neurodegeneration and Experimental Therapeutics (CNET) will receive more than $1.5 million from the National Institutes of Health to establish a dystonia research program with Harvard Medical School and Mt. Sinai Medical Center. The five-year grant will support studies on the movement disorder that affects nearly half a million Americans with involuntary muscle spasms that force the body into repetitive, twisting movements and awkward postures. Principal investigator and CNET director David Standaert, M.D., Ph.D., says the research will focus on the DYT1 gene, associated with inherited early-onset dystonia, in an effort to identify causes and potential therapeutic targets.

Rheumatoid Arthritis:

UAB has received a two-year, $3.3-million grant to create a national network enabling researchers to identify predictors of effectiveness for various rheumatoid arthritis (RA) treatments. The Treatment Efficacy and Toxicity in Rheumatoid Arthritis Database and Repository (TETRAD) will include 11 sites, establishing a large, sustainable pool of treatment-response data and a repository of related DNA and blood samples from patients being treated with different drugs. Principal investigator S. Louis Bridges Jr., M.D., Ph.D., UAB clinical immunology and rheumatology director and holder of the Marguerite Jones Harbert-Gene V. Ball, M.D., Endowed Chair in Rheumatology, says that improvement in the efficiency and cost-effectiveness of the use of current drugs will be a major advance in RA treatment. The National Institute of Arthritis, Musculoskeletal, and Skin Diseases, along with the national office and the Alabama chapter of the Arthritis Foundation, provided the funds.

Metabolic Syndrome: *UAB researchers report that substances in kudzu root could become a useful dietary supplement for metabolic syndrome. The fast-growing vine contains isoflavones that improve the regulation of contributors to the condition, including blood pressure, high cholesterol, and blood glucose. Puerarin, an isoflavone found only in kudzu, seems to have the most beneficial effect; it appears to steer glucose where it is useful, such as muscles, and away from fat cells and blood vessels, where excessive amounts have been linked with diabetes and obesity. While kudzu root has long been used as a dietary supplement in Asia, the scientists, from UAB's cell biology and pharmacology and toxicology departments, say that eventually it could complement insulin-regulation or blood-pressure medications.*

Bone and Connective Tissue: UAB recently opened Alabama's first full-service clinic for patients with bone dysplasia and connective tissue disorder. The multidisciplinary clinic, part of the UAB Department of Genetics, will provide diagnosis, treatment, and follow-up care for infants, adolescents, and adults with abnormalities of skeletal growth, bone density, joint flexibility, and strength; it also will collaborate with UAB maternal-fetal medicine specialists on consultative services for expectant families with suspected skeletal dysplasia or birth defects.

Autism: UAB has opened a Medical Autism Clinic in affiliation with Children's Hospital, offering specialists in genetics, nutrition, occupational therapy, speech therapy, rehabilitation, sleep disorders, and audiology in one location to expedite the evaluation of some medical problems common in children with autism spectrum disorders (ASD). The clinic, directed by pediatrics professor Myriam Peralta-Carcelen, M.D., is the only one in the greater Birmingham area and among only a few in the state. She says the clinic's goal is to address ASD-related issues in a comprehensive, coordinated, and timely way.

[Web Exclusive]

Alumni Profile:
Charles Butler, M.D.

Step into the ring with one of boxing's top doctors. **Medicine.uab.edu/magazine**

Aging:

• UAB's Division of Gerontology, Geriatrics, and Palliative Care received a five-year, $2.8-million NIH grant to study factors that help adults age 75 and older maintain independence and mobility following illness, hospitalization, and other events. The UAB Study of Aging II, building on previous research, will provide information to help develop new methods of optimizing the mobility and social participation of older adults. Richard Allman, M.D., director of the division and the Geriatric Research, Education, and Clinical Center at the Birmingham Veterans Affairs Medical Center and holder of the Emmett G. and Beverly S. Parrish Endowed Professorship, is principal investigator.

• UAB and the McKnight Brain Research Foundation are establishing a $10 million endowment to support the Evelyn F. McKnight Brain Institute at UAB. The endowment is made possible by a $5 million gift from the McKnight Brain Research Foundation and a $5 million matching commitment from UAB and other donors. The gift will enable the institute to exist in perpetuity and support UAB's research to better understand and treat age-related memory loss. David Sweatt, Ph.D., chair of UAB's Department of Neurobiology, directs the institute and holds the Evelyn F. McKnight Endowed Chair for Learning and Memory in Aging.

Online Extra:

Get the latest updates on UAB research.
www.uab.edu/research

Immune Response:

Through DNA analysis, UAB and Japanese researchers have uncovered the genetic identity of a cellular receptor for immunoglobulin M (IgM), the circulatory system's largest antibody and the immune system's first responder. After IgM binds to invading pathogens, the newly identified Fc mu receptor (FCMR) binds to IgM, triggering early immune responses. UAB pathology professor and lead author Hiromi Kubagawa, M.D., says that science has anticipated this discovery for nearly 30 years; previously, researchers thought this receptor was a molecule that regulated cell death, and they named it "toso"—a reference to the Japanese medicinal sake often drunk on New Year's Day to symbolize a long life. But the name—along with many earlier descriptions of this gene's function—is inaccurate, says Kubagawa. The finding could lead to agents that target and regulate FCMR function to help fight infectious, immunodeficiency, and autoimmune disorders as well as certain cancers.

Child Health:

• UAB obstetrics and gynecology professor Jeffrey S. A. Stringer, M.D., has received a five-year, $11.2-million grant to develop a primary-health-care program to reduce child mortality in Zambia. The funding, from the Doris Duke Charitable Foundation African Health Initiative, will provide training, resources, and an electronic medical record to address pneumonia, diarrhea, malaria, and other major causes of child mortality as well as adult HIV/AIDS care and pregnancy care.

• A UAB neonatology study has shown that training birth attendants in essential newborn-care techniques reduced stillbirths by more than 30 percent. UAB neonatology director Wally Carlo, M.D., led the project to train doctors, midwives, nurses, and traditional birth attendants in 96 communities worldwide in simple steps—based on guidelines from the World Health Organization and the American Academy of Pediatrics—to help babies survive birth and the first week of life. Topics included resuscitation, thermoregulation, breastfeeding, and care of common illnesses, among others. Though additional research is needed, Carlo says that "a package of essential newborn-care interventions, if implemented worldwide, might decrease potential deaths by about one million per year."

Honors:

• *UAB Hospital received its 10th consecutive Consumer Choice Award and is the only metropolitan Birmingham hospital listed among the National Research Corporation's 250 top hospitals. The award is based on a survey of consumer perceptions of quality and image.*

• *The new edition of* The Best Doctors in America *recognizes 297 UAB physicians. All were nominated by their peers in surveys.*

Tuberculosis: *Researchers have discovered a key mechanism that enables tuberculosis to escape detection and treatment and survive in humans for extended periods. The study, pairing UAB scientists with investigators at the University of Colorado-Denver, found that the WhiB3 protein allows* Mycobacterium tuberculosis *(*Mtb*), TB's causative agent, to subsist on fatty acids and adjust its metabolism to cope with stresses during infection. WhiB3's regulation of lipids also helps to keep the body's immune system in check. Lead author and UAB microbiologist Adrie J.C. Steyn, Ph.D., says that understanding* Mtb *persistence paves the way for the development of new medications to fight drug-resistant, latent TB, which is a global problem.*

Faculty News

Endowed Positions:

• Robert Cerfolio, M.D., has been named the inaugural holder of the James H. Estes Family Endowed Chair for Lung Cancer Research. Cerfolio is professor and section chief of thoracic surgery in the UAB Division of Cardiothoracic Surgery.

• Winfield Fisher III, M.D., a professor in the Department of Surgery, is the inaugural holder of the Griffith R. Harsh III, M.D., Endowed Chair in Neurosurgery.

• Frederick A. Hensley Jr., M.D., has been appointed to the Benjamin Monroe Carraway Endowed Chair in Anesthesiology. He will also serve as the vice chair of the UAB Department of Anesthesiology and director of the Division of Cardiothoracic Anesthesia.

• Xiaohua Li, M.D., Ph.D., has been named to the Tate Jordan Thomas Professorship in Psychiatric Medicine. She also serves as vice chair for research in the Department of Psychiatry and Behavioral Neurobiology.

Honors:

• Navin C. Nanda, M.D., professor in the UAB Division of Cardiovascular Disease and director of the UAB Echocardiography Laboratories, received the American College of Cardiology's International Service Award for his pioneering echocardiography work and for introducing those innovations to countries worldwide.

• James Raper, D.S.N., C.R.N.P., UAB associate professor of medicine and nursing and director of the 1917 HIV/AIDS Outpatient and Infectious Disease Clinics, has been inducted into the Alabama Nursing Hall of Fame. The honor, from the Capstone College of Nursing at the University of Alabama, recognizes career commitment and success.

Leadership Roles:

• David O. Freedman, director of the UAB Travelers' Clinic, has been appointed to the World Health Organization (WHO) International Health Regulations (IHR) Roster of Experts. The IHR is a set of rules and procedures designed to make the world more secure from public-health threats, and Freedman will be on call to go to Geneva, Switzerland, during crises to serve on review and emergency committees reporting directly to WHO's director-general.

• Daniel Marson, Ph.D., J.D., director of the UAB Alzheimer's Disease Center, has been named to the inaugural American Psychological Association Committee on Human Research. He joins six other members who will ensure that studies meet ethical and federal standards.

• Edward Partridge, M.D., director of the UAB Comprehensive Cancer Center and the Evalina B. Spencer Chair in Oncology, was named president-elect of the American Cancer Society National Board of Directors.

• Michael Saag, M.D., director of UAB's Center for AIDS Research and the Jim Straley Endowed Chair in AIDS Research, is the new chair of the board of directors of the HIV Medicine Association, the nation's largest professional society dedicated to HIV and AIDS.

• Richard Whitley, M.D., director of UAB's Division of Pediatric Infectious Diseases, has become president of the Infectious Diseases Society of America, representing more than 9,000 physicians, scientists, and other healthcare professionals.

Steve Wood

Rebirth

Ob/Gyn Enters a New Era

By Jennifer Lollar

In the sunlit lobby of the brand-new Women & Infants Center at UAB, you'll discover windows to the past. They're stained-glass panels set into a glass wall—the last vestiges of the Crippled Children's Clinic and Hospital that once stood a few blocks away. They serve as a reminder of the medical center's rich legacy of caring for women and babies—one that stretches back more than a century.

That legacy took a great leap forward this February with the opening of the Women & Infants Center, one of the most technologically advanced facilities of its kind in the nation. For the UAB Department of Obstetrics and Gynecology, a new home has helped inspire new ways of providing patient care and comfort, bold research initiatives, and novel educational opportunities. Those stained-glass windows to the past, it turns out, might also be windows to the future.

For many expectant parents, planning the colors and design of the nursery is one of the most exciting parts of pregnancy. Now imagine if that nursery were 10 stories tall, 430,000 square feet, and filled with the latest technological innovations, and you might get a sense of the challenge that faced UAB's caregivers.

When planning began for the UAB Women & Infants Center a decade ago, UAB ob/gyn specialists, neonatologists, pediatricians, and nurses saw it as an opportunity to reimagine how they provide expert care for patients and their families, says William Andrews, Ph.D., M.D., the new chair of the Department of Obstetrics and Gynecology. For the first time, all of UAB's inpatient services focusing on women and babies—from gynecology, urogynecology, gynecologic oncology, and routine and high-risk obstetrics to neonatal services and reproductive endocrinology and infertility—would be housed under one roof. The new building would include plenty of space, technology, and possibilities for increasing UAB's capacity to care for Alabama's women and their growing families.

The clinical staff played a crucial role from the very beginning, when the building was being designed. "When this process began, hospital leadership made the conscious decision to involve our physicians and nurses to ensure we had a facility that not only was technically superior, but one that also met the needs of both our patients and staff," says Andrews, a maternal-fetal medicine specialist and holder of the Charles E. Flowers Jr. Chair in Obstetrics and Gynecology. "Caregivers who are on our units every day know what they need to best serve our patients' needs and what our patients need to make their stay with us as comfortable as possible."

Teams of nurses and physicians combed publications related to innovations in design, looked at studies and opinion papers on the Center for Healthcare Design's Web site, and considered facility layouts published in *Health Environments Research & Design* and related journals. They also reviewed handouts and notes from past conference presentations, interviewed former patients, and traveled to other health-care institutions to see what worked and did not work for both patients and staff.

"From the start, a commitment was made to rely on the nursing staff for input into the design and operation of this facility," says Elicia Daley, R.N., M.S.N., administrative director of women and infants' services at UAB. "During the schematic design phase, members of the nursing leadership team visited several hospitals in the country to learn more about new concepts in women's and infants' care. Following these trips, we shared photographs and information on the most up-to-date designs with the project planning team." Daley adds that several nurses were actively involved in the development of the final design and construction documents; before the facility's completion, mock-up rooms allowed the staff to test their designs and identify logistical issues prior to moving in and opening the center. "Involvement in the building's design has given our nurses the ability to provide more efficient care to each patient," Daley says.

Privacy and Comfort

The result of all of this research, design, and construction is a facility made to match UAB's expert ob/gyn care—and a building that fundamentally changes how women and infants receive that care. Women in labor now arrive via the center's own driveway, with

According to Andrews (left) and Carlo (below), patients benefit from space and privacy, which enables infants to stay with mothers and families following routine or complex deliveries.

Steve Wood

Photos courtesy of Cayenne Creative

> "The facility's design supports our multidisciplinary family-centered model of care. UAB now has the largest all-private-room special-care nursery in the country." —Wally Carlo

valet and surface parking located next to the front doors. Inside, the look is more world-class hotel than hospital. Labor and delivery rooms are spacious and private. Likewise, postpartum rooms are expansive and welcoming, enabling infants to room in with new mothers. To encourage family/infant bonding, the rooms also provide sleep space for fathers or support people, and family visits are welcome around the clock. Medical equipment and supplies are tucked out of sight behind wooden panels whenever possible, and rooms include amenities such as flat-screen televisions, DVD players, small refrigerators, wireless Internet access, and video game systems. Nearby, down hallways decorated in warm colors, family lounges offer computers and playrooms for young siblings; other family facilities include parent sleep rooms, laundry and shower facilities, a lactation center, and a family hospitality center. Even the meals are different, Andrews says. "It's like hotel room service."

Antepartum (high-risk obstetrics) rooms, designed for women requiring hospitalization prior to delivery, and all rooms dedicated to gynecology patients are private as well. The facility also includes rooms designed for patients with mobility limitations, isolation rooms with separate ventilation systems, and lead-lined rooms for gynecologic oncology patients treated with radioactive implants. "These private and specialized rooms should lead to improved patient progression and satisfaction and lower infection rates," Andrews says.

Special Deliveries

"Babies delivered at UAB are born at the only Alabama hospital with a full-service Level IIIC Regional Newborn Intensive Care Unit (RNICU)—the highest designation possible," says neonatologist Wally A. Carlo, M.D., Edwin M. Dixon Professor of Pediatrics and director of the Division of Neonatology. "Should problems arise, these babies will have a better chance of surviving than infants

Left: Family visiting hours never end in the Women & Infants Center, which includes playrooms and family lounges. Below: Sliding doors and wireless technology help create comfortable private spaces in the RNICU.

Photos courtesy of Cayenne Creative

born in less well-equipped facilities." UAB's RNICU is the only one in the state with full perinatal and cardiovascular services, and it is staffed with neonatologists 24 hours a day.

Carlo adds that the new building's layout makes it easier for specialists to work in unison. "The highest-risk deliveries are performed in the caesarean section room next to the RNICU, which permits seamless transport of infants to the NICU after delivery," he explains. The maternity evaluation unit and labor and delivery area also are adjacent to the RNICU, and the first floor houses an emergency delivery and newborn-care room to handle births that arrive at the hospital in progress. The center also is set up to provide neonatal resuscitation anywhere a baby may be born in the building.

"UAB's survival rate for all premature babies significantly exceeds the national average, as does its rate for survival without mental, auditory, and visual disabilities," Carlo says. "In addition, our state-of-the-art carbon dioxide monitoring equipment is the only system of its kind in the state. Equipment lets us closely observe premature infants' CO2 levels, greatly improving our ability to care for critically ill infants and reducing the need for surgical repair of pneumothorax and its associated risks.

"The facility's design also supports our multidisciplinary family-centered model of care," Carlo says. All rooms in the RNICU and Continuing Care Nursery are private and include sleep space for parents, which means UAB now has the largest all-private-room special-care nursery unit in the country; special rooms are available for families with multiple births. The post-anesthesia recovery unit also allows well newborns to stay with their mothers while they recover from a C-section.

Beautiful Innovation

For patients, connecting with physicians and care providers has become easier as well. Nurse work areas have been placed as close to patient rooms as possible to minimize footsteps and ensure patient visibility. Wireless systems help nurses monitor patients and provide the highest level of infant security. Each caregiver also wears a wireless, hands-free electronic communicator—much like something out of *Star Trek*—for instant contact with other nurses or physicians. Skybridges connect the center with the rest of UAB Hospital and eventually will link it to the new Children's Hospital now under construction. And as before, patients have 24-hour access to UAB's maternal-fetal medicine specialists, who can assess complications and help develop pre- and post-birth management strategies.

While the new Women & Infants Center has been built to meet current needs—UAB has experienced a 50-percent increase in demand for women's and infants' services over the past decade—it also has been built with an eye toward the future. "The design integrates a wide spectrum of women's services and positions us to accommodate evolving, cutting-edge approaches to obstetrical and neonatal care" as they develop, Andrews explains.

"It's the most technologically advanced building we have to offer," he says. "And it's a beautiful building that our patients and their families will enjoy visiting."

Photos courtesy of Cayenne Creative

Numerical Advantage

What's Inside the Women & Infants Center

59 antepartum and postpartum rooms

56-baby Regional Newborn Intensive Care Unit

52-baby Continuing Care Nursery

30 gynecology/gynecologic oncology rooms

17 labor, delivery, and recovery rooms

13 maternity evaluation unit rooms

4 operating rooms for C-sections and other maternity-related procedures

5-room post-anesthesia recovery unit

3 well-baby nurseries

Fertile Ground

Incubating Breakthroughs in Cervical Cancer and Infertility

By Troy Goodman

UAB's Women & Infants Center was designed to welcome new lives into the world—and breathe life into new ideas that could change the world. Like vaccines that could help reduce anxiety as well as prevent disease. And treatments that can preserve a patient's chances to start a family.

Before moving into the new facility, UAB's Department of Obstetrics and Gynecology already was a key component of four federally funded national research networks. Now all of them—along with scientists from each of the department's divisions—converge in the building, creating a powerhouse of discovery.

Last year, UAB gynecologic oncologists became part of a fifth network when the National Cancer Institute awarded an $11.5-million Specialized Program of Research Excellence (SPORE) grant in cervical cancer to the UAB Comprehensive Cancer Center, Johns Hopkins University, and the University of Colorado at Boulder. The SPORE focuses on developing next-generation human papillomavirus (HPV) vaccines to prevent cervical cancer and testing new therapeutic agents that show promise in preventing, slowing, or treating the disease.

Warner Huh uses the "gene gun" to administer a DNA-based HPV vaccine.

> "We're looking for affordable, effective, and durable agents that can help eliminate disease worldwide." —Warner Huh

Health officials recommend routine vaccination for girls (ages 11-12) and catch-up shots for females (ages 13-26) using two approved vaccines, Gardasil and Cervarix. The vaccines help generate antibodies capable of preventing infection by two of HPV's most worrisome strains, HPV 16 and HPV 18, which cause 70 percent or more of all cervical cancers. But these existing vaccines have limitations. Namely, they protect against only a small number of HPV strains, and they are cost-prohibitive for cancer-prevention programs in developing countries and even rural Alabama.

"We can't sit back, rest on our laurels, and say we have vaccines that work," says Warner Huh, M.D., an associate professor of obstetrics and gynecology and SPORE co-lead investigator. "The SPORE is about taking those advances forward and looking for affordable, effective, and durable agents that can help eliminate the burden of disease worldwide."

Reducing Cancer, Easing Fears

One SPORE project that holds promise is called the L2 prophylactic vaccine, which targets an HPV protein that helps generate antibodies capable of preventing infection by a diverse number of HPV strains. Huh says having an inexpensive vaccine that covers all cancer-causing types would be a windfall in the global cancer fight.

A broad-spectrum vaccine could reduce or eliminate the need for Pap testing, saving health-care dollars and reducing patient stress. "I can see us going beyond reducing the morbidity and mortality related to invasive cervical cancer, which in itself would be a huge victory," Huh says. "We have a clear chance to reduce the enormous financial impact and terrible anxiety associated with the diagnosis and treatment of women with precancerous lesions of the cervix."

Another initiative is testing a "gene gun," a needle-free method of administering a DNA-based HPV vaccine. In this case, the vaccine is delivered to the epidermal layer, where the immune response may be greater than in the muscle. Ronald Alvarez, M.D., director of the UAB Division of Gynecologic Oncology, is co-principal investigator for this phase I trial.

Other SPORE research is investigating HPV treatment options. "We're looking at unique agents—therapeutic vaccines or immuno-

therapeutics—that hopefully will be used to treat women with cancer and also precancerous diseases like cervical dysplasia," or the appearance of abnormal cells, Huh says.

Protecting Fertility

Specialists also are exploring new territory in preserving and restoring fertility, particularly for women facing medical treatments such as chemotherapy or radiation that may impact childbearing. UAB studies and offers the latest solutions through its Reproductive Endocrinology and Infertility Services Clinic, says G. Wright Bates, M.D., associate professor of obstetrics and gynecology and the clinic's director.

Options for women include in vitro fertilization (IVF) and embryo freezing, IVF and egg freezing, and ovarian tissue freezing and reimplantation. "As far as we know, frozen eggs, embryos, and ovarian tissue are good indefinitely," Bates says. After their medical treatments, women within a specified age bracket can expect a high degree of success at achieving pregnancy using these methods, he adds.

With IVF and embryo freezing, women take fertility medications prior to the retrieval of eggs, which happens before medical treatment begins. The eggs are fertilized through IVF in the laboratory, and the embryos are frozen. For IVF and egg freezing, the eggs are harvested and frozen without fertilization so that they can be used later for IVF. Because of the risks and difficulties surrounding pregnancy for women in their 40s or later, UAB does not routinely offer IVF for women who have reached age 43, Bates says.

Ovarian tissue freezing requires tissue retrieval before medical treatment. The tissue is then frozen and stored for reimplantation in the ovary after treatment is complete, restoring normal hormone production. Patients choosing this method do not need the fertility treatments required for IVF.

Bates adds that each patient's options and ability to have children will depend on her particular course of medical treatment and other factors, but he encourages women to discuss reproductive issues with their doctors. "If there's a desire to start or continue a family in the future, now is the time to talk about it," he says.

G. Wright Bates encourages women to discuss fertility preservation options with their physicians before receiving treatment for diseases such as cancer.

Discovery Networks

UAB's ob/gyn department plays key roles in major research networks:

- One of 17 NIH Neonatal Research Network Centers*
- One of 14 centers in the NIH Maternal-Fetal Medicine Units Network*
- One of 7 in the NIH Global Network for Women's and Children's Health Research*
- One of 5 centers in the NICHD Genomics and Proteomics Network for Preterm Birth Research
- One of 3 participants in the NCI cervical cancer SPORE

** UAB is the only facility involved in all three NIH initiatives to systematically track and improve women's and infants' care.*

First Impressions

Setting the Record Straight for Students

By Rosalind S. Fournier

Brian Gleason, M.D., looks well rested—which may come as a surprise to some School of Medicine students. According to the UAB obstetrics and gynecology professor, many students have misconceptions about his specialty, believing that ob/gyns are chronically sleep-deprived and disproportionally sued compared to physicians in other fields, for example. These false impressions can present a challenge when trying to recruit new ob/gyn residents.

"Early on, we work to blow away a lot of the biases they have," says Gleason, who feels a responsibility to introduce himself and other ob/gyns to students as "normal people with normal lives." While there is no shortage of practicing ob/gyns—except in rural areas, a problem in every medical specialty—and UAB's residency program is considered very competitive, Gleason and his colleagues make a point of educating potential residents about the realities of what he considers one of the happiest fields in the hospital. "If we don't continue to sell ourselves, we could be left out," he says.

Alice Goepfert and Brian Gleason (second and third from left) share the realities of ob/gyn practice with potential residents as early as their first year of medical school.

Realities and Rewards

One reality of ob/gyn practice that concerns students is the cost of malpractice insurance, which can be disproportionate compared to other fields. Gleason points out that this can be especially problematic for women, who are entering the specialty in record numbers. Ob/gyns who are mothers of small children, for example, may want more flexibility in their work, yet if they choose a part-time or job-sharing practice, "their income is less, but they're still paying that malpractice."

The unpredictability of ob/gyn schedules, especially on the obstetrics side, is another key issue for potential residents. Unless a birth is scheduled, a woman can go into labor or have an obstetric crisis at any time. However, Alice Goepfert, M.D., a maternal-fetal medicine specialist and director of UAB's ob/gyn residency program, says that part of the job cuts both ways. "You never know what's going to come through the door. You may be there with nothing going on, and the next minute three people come in, with two of them bleeding and the third needing an emergency C-section," she says. "That's stressful to some people, but to others it's invigorating to think on your feet, take care of the situation, and often save the lives of moms and babies."

Gleason and Goepfert also emphasize aspects of ob/gyn that students might not be familiar with, including the field's unusual opportunity to perform surgeries as well as practice day-to-day medicine. "It's a great mix," Goepfert says. "Ob/gyn is a surgical specialty, *and* you get to have a long-term relationship with your patients. A general ob/gyn could take care of somebody from the time they become sexually active or start getting Pap smears through all of their reproductive years, then take care of them when they go through menopause. You can provide them with lifelong care."

Doctor, Teacher, Mentor

Former Resident Comes Full Circle

When Alice Goepfert, M.D., was appointed director of the School of Medicine's ob/gyn residency program last year, she felt a special connection with her new charges. That's because she once literally stood in their shoes as a UAB ob/gyn resident herself.

"It's really exciting to be so involved in their training and making sure they'll be excellent ob/gyns when they finish," says Goepfert, who also treats mothers and babies as a maternal-fetal medicine specialist. She hopes to pass along some of the excitement and inspiration she received from her own teachers. "Obstetrics is fascinating because we deal with two patients at once, and there are so many physiologic changes during pregnancy," she says.

A Selma native, Goepfert attended medical school at Baylor College of Medicine in Houston, where she met her future husband, Paul Goepfert. When the time came for them to choose residency programs—ob/gyn for her, internal medicine for him—she was ready to come home. "UAB had an excellent internal medicine program and ob/gyn residency program," she says. "It was our first choice, and we were lucky to end up matching here. We've been here ever since."

Personal Introduction

Students can get an early—and personal—introduction to ob/gyn practice through UAB's Special Delivery Weekends. Initiated by gynecologic oncology fellow Kerri Bevis, M.D., the program invites first- and second-year SOM students to the hospital on weekends when their senior counterparts are between rotations. The students get the chance to shadow physicians in labor and delivery and gain greater exposure to the field than they normally would at that stage of their education.

"The idea made sense to me," Bevis explains. "I remembered being a medical student and having very little clinical exposure in the first two years. The Special Delivery Weekends create a win-win situation, because even if the students have no interest in ob/gyn, most will jump at the opportunity to get into the hospital and take care of patients. And you might get lucky and grab someone who has such a great experience that it motivates him or her to enter the field."

In addition, an ob/gyn special-interest group helps SOM students to form an accurate image of the field. Throughout the year, "the group meets with the pre-clinical students and invites residents, faculty, and practitioners to come talk about ob/gyn and why they love it," Goepfert says. "We acknowledge that you do have the malpractice and the hours to consider, but we stress that it's also a really fun field.

"A large part of the job is taking care of healthy women during a very happy time in their lives, and for the most part, delivering babies is just a blast," Goepfert explains. "When we do high-risk obstetrics, we tend to take care of situations where people may not have good outcomes, and that can be sad and tragic in many ways. But then sometimes you're able to help those patients through the next pregnancy and improve the outcome, and that's very gratifying."

Alice Goepfert (right) has won honors and admiration for her work with medical students and residents.

By Caperton Gillett

"Ever since" has included Goepfert's UAB residency, which she completed in 1995, her fellowship in maternal-fetal medicine, and an invitation to join the UAB faculty in 1997. In her first job, she was ob/gyn clerkship director, watching students experience their rotations. "There have been so many great students, and many of them have become our great residents," she says.

In 2007, Goepfert was tapped to head a new educational experience for all first-year SOM students—the Patient, Doctor, and Society course. It's the initial course of their medical careers and an introduction to medicine's true fundamentals—ethics, communication, compassion, and "what makes an excellent physician in terms of impacting patients and the community beyond your medical knowledge," she explains.

"It was a little out of my realm of comfort," Goepfert says of her role as curriculum director. "I'm not an ethics expert, and I don't study professionalism per se, but I use them every day in my clinical practice. It was challenging but exciting."

When the position of ob/gyn residency program director opened in August 2009, Goepfert was invited to step in. "It's a big responsibility," she says. "We're guiding and mentoring future ob/gyns and future academic physicians. I had so many powerful mentors as researchers and clinicians, and that really inspires me."

Goepfert's accomplishments recently were recognized in two ways. She received the 2010 UAB President's Award for Excellence in Teaching for the SOM. And earlier this year, UAB's new Women & Infants Center opened with a space named in her honor. In recognition of her efforts on behalf of her patients, residents, students, and colleagues, Goepfert's friends and family across Alabama and around the country raised money to put her name on labor and delivery room number four.

"My wonderful friends did this because they know how important it is to me, to all of the people I work with, and to the women and infants of Alabama," Goepfert says. "They've seen how much it means to me to take care of patients and work with the medical students and residents. They know how much I love what I do."

Regina Benjamin, Surgeon General

Alumna Becomes America's Doctor

By Jo Lynn Orr

Regina Benjamin, M.D., knows a thing or two about fish. She grew up in Daphne, Alabama, and established a clinic in the seaside village of Bayou La Batre, where she once accepted a basket of fish as payment from a patient. And when she visited UAB in February for Medical Alumni Weekend, the 18th surgeon general of the United States Public Health Service shared a story about—naturally—fish:

"A young woman, jogging along the beach one morning, saw an older gentleman tossing starfish back into the water. 'There are hundreds of starfish along this beach, and soon the sun will be high enough to kill them all,' the woman said. 'Throwing a few back is not going to make a difference, so why are you doing it?' The old man looked at her for a moment, and then picked up a starfish. He said, 'Because it will make a difference to this starfish,' as he tossed it into the water."

The story, Benjamin told her colleagues, serves as an inspiration: "I hope that we will all go back to our communities, find our own starfish, and make a difference in its life."

Office of the Surgeon General

UAB Archives

Clockwise from above: Regina Benjamin became U.S. surgeon general in January 2010; as an SOM student; caring for a patient at her Bayou La Batre clinic; with SOM dean Robert Rich at Medical Alumni Weekend.

Benjamin's efforts to improve lives in her own community have become legendary. Now, as surgeon general, she hopes to make a positive difference on the health of all Americans.

Trial by Fire—and Floods

Benjamin graduated from the School of Medicine in 1984, having already attended Xavier University and the Morehouse School of Medicine. She opened her Bayou La Batre clinic following a family-practice residency at the Medical Center of Central Georgia.

She faced challenges from the start, working in emergency rooms and nursing homes to keep her doors open. To gain more business experience, she earned a Master of Business Administration degree at Tulane University. Soon afterward, Benjamin converted her office into a nonprofit rural health clinic.

Benjamin rebuilt that clinic three times—after hurricanes Georges and Katrina destroyed it in 1998 and 2005, and again after a fire in 2006. She never doubted that she would rebuild—or remain in Bayou La Batre. In fact, Benjamin made house calls in her truck after Georges came through. Following Katrina, which leveled most of her patients' homes, she opened a makeshift infirmary at the local community center.

Benjamin says she has a keen understanding of the character and economic circumstances of her working-class patients, and today, more than 4,000 people, including uninsured patients, rely on her clinic for medical care. Reflecting Benjamin's creed to help anyone needing treatment, the clinic charges fees on a sliding scale.

Prescription for a Nation

In 2009, President Barack Obama nominated Benjamin as surgeon general; she took office this January. Now, as America's chief health educator, she may face her greatest challenge yet: helping the country beat the obesity epidemic. Her national agenda includes working with First Lady Michelle Obama and U.S. Health and Human Services Secretary Kathleen Sebelius to help Americans lead healthier lives through better nutrition, regular physical activity, and improving communities to support healthy choices.

"I want to bring understanding and clarity to the national conversation about health and health care," Benjamin told her fellow SOM alumni. She also touched on health-care reform. "I'm looking

Courtland Richards

forward to the day when patients can have access to affordable, quality health care because I've seen what being uninsured can do—a simple infection can become the catalyst for surgery, uncontrolled hypertension can lead to debilitating stroke, and uncontrolled diabetes can lead to amputations."

Offering Help and Hope

At Medical Alumni Weekend, Benjamin received the SOM Distinguished Alumnus Award and a "native daughter" resolution from the Alabama Legislature for her accomplishments and efforts to help the underserved and uninsured. (See page 32 for more on Alumni Weekend.)

In her speech, Benjamin kept returning to those patients in need, urging alumni to reach out to them. "You never know who's watching you," she said, relating a story about a young Bayou La Batre girl who came to UAB for medical treatment. The girl was so impressed with UAB's many buildings that she told Benjamin she would like to clean them when she grew up. Careful in her response, Benjamin explained that besides cleaning UAB's buildings, the girl also could sit in the classrooms as a student, learn how to start her own cleaning business, and then contract to clean every building in the state if she wanted. "I didn't want her to think there was anything wrong with cleaning buildings—because there isn't—but I also wanted her to know that she had options."

For Benjamin, the encounter illustrates the power of setting an example and connecting with patients. These efforts, she says, can make a lasting impact on the health and lives of people everywhere—and perhaps change the future for a few more starfish.

Five Questions for the Surgeon General

1. *UAB Medicine*: How has your UAB medical education prepared you for the role of surgeon general?

Benjamin: *I couldn't have had better preparation. You get the best of all worlds at an academic health center like UAB. I recall going to Boston, and we were light years ahead of the other residents because we had clinical experience. SOM students also participate in acting internships. You're treated as if you were already an intern; you have to make decisions and be responsible for them. So when I became an intern, I was ready. That background and the relationships I built through the years at UAB and in Alabama helped prepare me for the national stage.*

There also was no better preparation than being in the trenches at the Bayou La Batre clinic, dealing one on one with patients. And in terms of politics, Alabama politics is probably as tough as it comes. My experiences definitely prepared me for Washington politics. But local politics is always harder because you know the individuals. You see them face to face, and you're going to see them again, so you have to be straight with them. Each day you must contend with questions such as, "what will this medicine do for me" or "how am I going to pay this bill and still feed my family?"

2. *UAB Medicine*: What do you hope will result from President Obama's health-care reform efforts?

Benjamin: *I hope that we can have quality, affordable health care that's available to everybody. I also hope that as physicians, we wouldn't have to beg and plead to get services for our patients—that we can easily get them the treatments they need. In general, I would like for any reforms to just make it easier to practice medicine—for both patients and doctors.*

3. *UAB Medicine*: Regarding the fight against childhood obesity, do you plan to use social media to broadcast your message?

Benjamin: *With the "Let's Move" initiative that Michelle Obama has launched, there are no bounds in getting the message out to parents and kids. We're doing a number of public service announcements, and a comprehensive social-media campaign is associated with them. We're definitely using varied media tools to reach kids, whether it's Facebook, Twitter, or other social networks.*

4. *UAB Medicine*: As head of the U.S. Public Health Service Commissioned Corps, how will you use the Corps to implement your goals?

Benjamin: *There are 6,500 members of the Commissioned Corps stationed throughout the world—some are scientists, while others are clinicians and administrators—and they all will follow and implement the surgeon general's directives. We're also looking at the Healthy People 2020 program, which provides science-based, 10-year national objectives for promoting health and preventing disease, to see how the Commissioned Corps can help implement its objectives wherever they are stationed and spread the program's message to the public.*

5. *UAB Medicine*: What is your advice for SOM students and alumni?

Benjamin: *I'm very proud to be an SOM alumna. When you're in medical school, you don't think about it much, but the relationships that you build up through the years are so important, and you want to make sure you nurture them. As you move through your career, there are only so many people who will understand what you go through in practicing medicine. You will find that the relationships you have built with colleagues, alumni, and professors are invaluable, because you know you can pick up the phone and call them, and they will be there for you.*

Research Focus

Stimulating Discoveries

By Tyler Greer

Scientific research is proving to be a good investment. Following the passage of the American Recovery and Reinvestment Act of 2009 (ARRA), the National Institutes of Health awarded $8.2 billion to investigators to help stimulate the economy, create or retain jobs, and invigorate discovery. UAB researchers received almost $71 million of these NIH funds for projects based on scientific method, importance, and potential for impact. Now vital research is beginning or continuing, and bringing new hope to patients battling lupus, heart disease, brain tumors, infectious diseases, and a host of other conditions.

"The stimulus funds have given the NIH a chance to do some remarkable things that they otherwise couldn't have done," says Robert Kimberly, M.D., director of the Comprehensive Arthritis, Musculoskeletal, and Autoimmunity Center and holder of the Howard L. Holley Research Chair in Rheumatology. Recently, Kimberly was invited to discuss his ARRA-funded research at a national news conference led by Vice President Joe Biden.

Stimulus-funded UAB research is creating jobs and could save lives. Robert Kimberly says one study could lead to personalized treatment for lupus patients.

Grand Opportunities

Several projects supported by the NIH received RC2, or Grand Opportunity, grants, which allow researchers to pursue their best ideas—those that could make significant progress or be completed in two years—without worrying about their budget. A large number of outstanding ideas rose to the forefront, with UAB researchers earning 11 percent of one NIH institute's RC2 funding. Kimberly calls the grants "just astonishing. This type of opportunity for researchers has never happened before."

One example of these projects is Kimberly's own multisite, UAB-led study to find a genetic link to end-stage renal disease in lupus patients. A $3.35-million grant led to the creation of a national consortium to conduct a genomewide association study. The goal is to define biologic factors that would identify lupus patients who are likely to develop severe kidney injury, enabling physicians to tailor treatments for individual patients.

Such a breakthrough would benefit patients—and the public. "Among people with lupus and severe kidney damage, dialysis costs currently exceed $300 million a year," Kimberly says. "If we could reduce the number of people needing dialysis by 50 percent, which is not an unreasonable estimate, we could save the health-care system $150 million a year. The NIH and the government would get an enormous return on their investment."

Recruitment and Retention

Harald Sontheimer, Ph.D., neurobiology professor and director of the Civitan International Research Center and UAB's Center for Glial Biology in Medicine, says that 15 to 20 jobs were created or saved thanks to the nearly $2 million in ARRA funds his groups received. He also was able to hire two new faculty members, including an expert on multiple sclerosis and cerebral palsy. Both positions are expected to attract their own research grants and additional jobs. "A new faculty member setting up a laboratory is going to hire technicians and research associates," Sontheimer says. "So this isn't creating one job; it's creating five or six jobs immediately."

Another ARRA award extends an ongoing study on primary brain tumors or gliomas that often present with seizures. "It gets us closer to clinical trials with research that we hope will benefit brain tumor patients, and it enables me to retain some key scientists," Sontheimer says.

Progress Reports

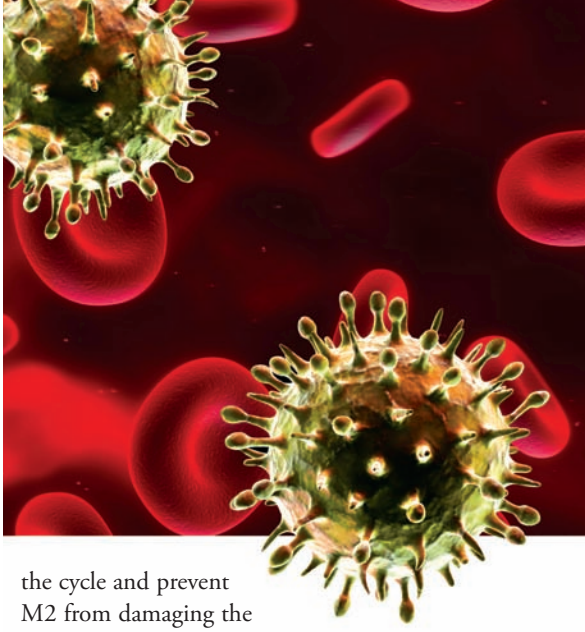
ARRA funds have a higher level of accounting and scrutiny compared to normal NIH grants. Researchers must make quarterly reports on scientific progress, budgets, and the employment impact of each grant. Kimberly says that a number of UAB investigators work closely with NIH program officers to keep them informed between reports. "This is less formal, but it enables us to get the science to them, so whether they're talking with other people at the NIH or speaking in a more public forum, they're very much up to date on our progress," Kimberly says.

Investigators are already discussing research efforts after the two-year stimulus ends; Kimberly advises them to focus on building upon the present opportunities that have been created by the stimulus funding. "Those are very real and will yield substantial advances in our science," he says.

Strains of Thought

UAB Researchers Follow the Flu

By Dale Short



Ever since H1N1 began making world headlines, UAB physicians and researchers have played leading roles in response to the influenza pandemic, in areas ranging from public policy to clinical treatments.

One of them is Richard Whitley, M.D., UAB distinguished professor of pediatrics and infectious disease, who serves on the H1N1 working group of the President's Council of Advisors on Science and Technology, charged with making recommendations to President Barack Obama on the federal response to the flu. Earlier, research that Whitley conducted with UAB's David Kimberlin, M.D., on the correct dose of Tamiflu for infants, led to an FDA Emergency Use Authorization.

"We did the Tamiflu study in anticipation of the pandemic because there was absolutely no data on the pharmacodynamics for children under the age of two," Whitley says. "Fortunately, by last spring, we had collected enough data to make very specific dosage recommendations for emergency use.

"In general, studying babies and new medications is exceedingly difficult. One attribute of a collaborative group like ours is that we were able to fill that gap. But it also took the help of community physicians, and of parents willing to support the study because they recognized its significance."

Another UAB researcher contributing to the influenza effort is Sadis Matalon, Ph.D., Alice McNeal Professor and vice chair for research in the Department of Anesthesiology. He co-authored a study that sheds new light on how influenza damages the lungs, and raises hope of new pharmacology that can strike at the Achilles heel of H1N1 and other flu strains.

"The flu virus has a number of proteins that help it avoid detection by the immune system," Matalon says. "We found that the M2 protein is absolutely necessary for the virus to replicate inside the nucleus of a cell. The components of the virus then go to the cell's surface, where they combine and form other viruses. M2 is basically an ion tunnel that allows ions to go back and forth."

Collaborating with James Noah, Ph.D., and Diana Noah, Ph.D. of Southern Research Institute, Matalon's team learned that antioxidant compounds can interrupt the cycle and prevent M2 from damaging the crucial epithelial cells inside the lungs. "Although we're still looking for alternate targets," Matalon says, "we're very excited about the possibilities of what we've found." The Noahs and Matalon recently received a four-year, $1.5-million grant from the National Heart, Lung, and Blood Institute for their flu research.

Whitley adds that while the current flu pandemic appears to be tapering down, it shouldn't be ignored. "This was basically an exercise to prepare us for more severe versions of the virus," he says. "It doesn't mean people shouldn't be immunized. We can't rest on our laurels and assume we've seen the last of this."

RU DUI? *Seeking Solutions for Distracted Driving*

By Bob Shepard

America's roads face an epidemic of drivers under the influence—of glowing screens on cell phones and other handheld devices. In December, UAB's University Transportation Center (UTC), part of the UAB Injury Control Research Center (ICRC), organized the Alabama Distracted Driving Summit as part of a national debate on the issue. The University Transportation Center for Alabama, based at the University of Alabama, co-sponsored the event.

While distracted driving includes all activities that draw attention from vehicle operation—eating, radio tuning, and applying makeup, for example—mobile communication and entertainment devices have compounded the problem. "The U.S. Department of Transportation estimates that 6,000 people died in distracted driving-related vehicle crashes, and 500,000 were injured, in 2008," says Despina Stavrinos, Ph.D., a UAB UTC researcher who organized the summit with UAB UTC and ICRC director Russ Fine, Ph.D., and others. The National Safety Council reports that people using cell phones or sending text messages caused 28 percent of traffic accidents, she adds. The danger is highest for young drivers, who have grown up surrounded by mobile technology.

United States Secretary of Transportation Ray LaHood presented the keynote address at the summit, which brought together leaders in transportation, public policy, law enforcement, and science to discuss ways to change behavior. LaHood said that the tactics that have curbed drunk drivers should be applied to distracted motorists: "It takes a consistent combination of education, effective enforcement, a committed judiciary, and collective efforts by local, state, and national advocates to put a dent in the problem." He also encouraged parents, teenagers, and employers to set and enforce rules against the use of handheld devices behind the wheel.

U.S. Transportation Secretary Ray LaHood discussed educational and legal options to curb distracted driving.

Forty-six states have legislation pending banning distracted driving in some form, and UAB's UTC has participated in a major push for bipartisan action in Alabama. "Because of the summit, many more people have become better informed about the problem," says Fine. "We intend to keep the anti-distracted driving campaign going."

Map Quest

Determining a Protein's Topography

By Doug Gillett

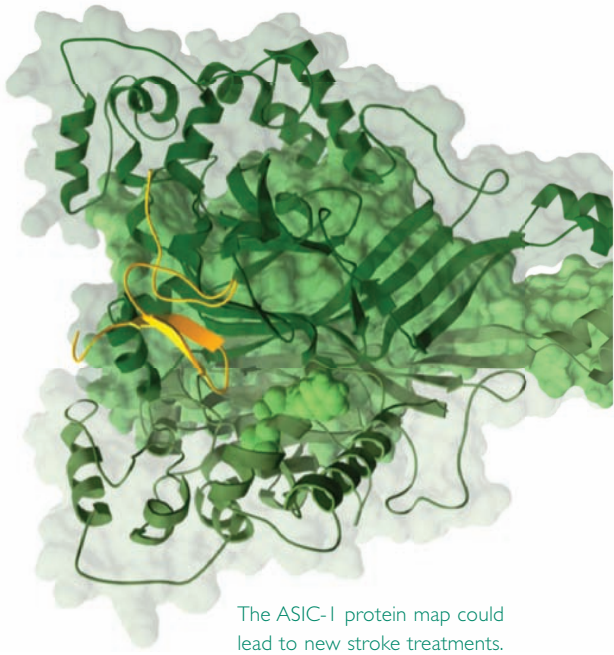
If you're going on a long journey, you had better bring a map.

Scientists struggling to navigate the complex process of brain-cell death after a stroke now have one of their own—a digital, three-dimensional map developed by UAB researchers. Using existing biological data and advanced modeling software, these investigators plotted a protein called acid-sensing ion channel-1 (or ASIC-1) that acts as a "gateway" on the surface of brain cells and is activated by a drop in the brain's pH level following an ischemic stroke.

"When there's a blood clot somewhere in the brain, that area loses the ability to get oxygen and starts performing anaerobic processes that create lactic acid, and thus a drop in pH," says Yawar Qadri, an M.D./Ph.D. student in UAB's Department of Physiology and Biophysics and the lead author of the map study. "That activates these protein channels, which leads to the death of the neuron. If you can block this activation, you can preserve brain tissue, so that's where we started."

Understanding the structure of ASIC-1 will greatly assist researchers in designing drugs to inhibit that channel directly, Qadri says. The map project also showed that emergency responders may have more time to effectively diagnose and begin treating a stroke than originally thought. "Most of the drugs we have now must be applied in a one-hour window, which just isn't realistic," Qadri explains. "This pathway shows that we've got a longer window—we've gone from one hour to three or four hours."

Turning this information into interventions that can be tested in clinical trials is another task entirely, and one that's a long way off, Qadri says. But Dale Benos, Ph.D., the University of Alabama Health Services Foundation Endowed Chair in Biomedical Research and co-author on the study, published in the *Journal of Biological Chemistry*, says the map's data can make designing such treatments dramatically easier and more efficient—and it could impact conditions far beyond stroke.



The ASIC-1 protein map could lead to new stroke treatments.

"The idea of generating an *in silico*, or digital, model of the ASIC-1 protein is important because there have been several studies where this class of molecule has been implicated in a number of clinically relevant conditions—pain, learning, psychological disorders, neurodegenerative diseases, and even cancer," Benos says. "With a model of this sort, we can look for small-molecule inhibitors that can target areas known to be able to prevent the function of this channel."

A New Age for Hospitals

Inside UAB's Specialized Geriatric Unit

By Tara Hulen

A chart can't tell a physician everything. And those missing pieces are particularly crucial in caring for elderly patients. "A hospital might admit an 85-year-old with pneumonia without knowing she is depressed, has functional decline at home, has memory loss, or that her spouse died a month ago," says Kellie Flood, M.D., assistant professor in the UAB Division of Gerontology, Geriatrics, and Palliative Care. Those coexisting mental, physical, and social issues can affect how well elderly patients recover from the health issue that sent them to the hospital, she adds.

Last year, UAB Highlands opened its Acute Care for Elders (ACE) Unit, dedicated to making sure that geriatric patients' specialized needs aren't overlooked. Flood, the unit's director, says the ACE model relies on interdisciplinary teams instead of a multidisciplinary approach with specialists working largely independently. "All team members—nurses, a geriatrician, physical and occupational therapists, social workers, nutritionists, pharmacists, volunteers, and case managers—meet daily to focus on each patient," Flood says. "We're better able to identify geriatric issues, prevent new ones, and address existing ones" while treating their current illness. "You need a team to do this because no one person can," Flood explains.

A key to the ACE model is baseline functional and cognitive screenings, which often take place before the specialists meet the patient. Flood says that patients may overestimate how well they function at home, making tests and family interviews vital. About half of the patients tested in the unit's first year had some cognitive impairment.

With this knowledge, a physical therapist can adjust exercises, or a social worker might alter discharge information for a patient with memory problems. These details can "dramatically impact hospitalization and discharge planning," Flood says, helping to reduce hospital stays and readmission rates.

Other unit features make hospital stays more pleasant, productive, engaging, and healthy for elderly patients. The SPOONS program enlists volunteers to help patients with meals, providing assistance and company while freeing nurses' time. Flood hopes to add senior-friendly exercise using the Nintendo Wii interactive video gaming system.

ACE units are popping up nationwide, and Flood hopes the interdisciplinary concept will spread internally. One former patient is helping by funding a new geriatric program for nurses. "They will become their units' geriatric experts and take ACE concepts around the hospital," Flood says.

Field Notes

Trimming Disparities

By Susannah Felts

During her second week at the UAB School of Medicine, Whitney McNeil was performing a blood sugar check when she got a shock: Instead of providing a numeric value, the glucose meter simply read "high." She alerted her supervisor, who told the patient to go straight to the emergency room. "I was worried that he might not make it," McNeil recalls.

The procedure was unusual for another reason: It didn't take place in a medical facility. Instead, McNeil is more likely to find her patients in Birmingham barbershops. Her screenings are part of a volunteer effort organized by UAB's chapter of the Student National Medical Association (SNMA), an organization founded in 1964 at Meharry and Howard University medical schools to advocate for minorities in medicine.

Most SOM minority students join SNMA's ranks, says Anjanetta Foster, M.D., assistant dean for diversity and multicultural affairs. The group holds community health screenings several times a year, checking for warning signs of hypertension and diabetes and counseling the public about preventing and finding help for these common but sometimes avoidable conditions. SNMA members often seek locations like barbershops and beauty salons—places where people "just relax and hang out," notes McNeil, the current SNMA chapter president. There the doctors-in-training also find a ready audience of mainly African-American residents. "Blacks are disproportionately affected by the consequences of high blood pressure," Foster notes. "And we often see a lack of understanding about how to treat it, or why it should be treated."

SNMA's outreach brings care to individuals who rarely, if ever, receive it. And it provides a less intimidating experience for patients, who often feel more at ease with a doctor of their own race, Foster explains. On Labor Day weekend last year, the group conducted screenings for the March for Health Equity in Selma and Montgomery. "We found people who hadn't been to a doctor in 30 years. It's not that they don't want to; there's just no access," McNeil says.

Barbershops provide a relaxed atmosphere for SNMA screenings. Assistant dean Anjanetta Foster (middle) and chapter president Whitney McNeil (right) attend to a patient in downtown Birmingham.

At the barbershop screenings, most people have health insurance, "but they often have health concerns they just don't want to think about," McNeil says. "We help open their eyes and make them realize they need to see a doctor." The students point out opportunities for free and low-cost health care, such as the M-Power Clinic, which involves volunteers from the SOM's Equal Access Birmingham group. They also steer high-risk patients to the emergency room, as McNeil did, or as Foster did at a recent screening where two women were found to have near stroke-level blood pressure.

In addition to screenings, SNMA organizes the annual Teen Summit, drawing more than 100 Birmingham-area high school students. The one-day event includes preparation for the ACT college entrance exam; a forum with doctors, lawyers, and other professionals; and meetings with college representatives. While the summit's broad goal is to prepare teens for college, it also helps dispel any doubts about pursuing a health-care career, supporting SNMA's mission to increase diversity in the medical community. "We've had teens say, 'I was told by a counselor that I should become an engineer, but I've always wanted to be a doctor,'" says Foster. "Without SNMA providing an example, we might have lost that person as a physician."

McNeil, who grew up in Birmingham, says participating in SNMA has "changed how I think about medicine." And she feels that the group is making a definite difference in the city. "We're the ones who need to make people aware of what's going on in these communities," she says. "If we don't do it, who will?"

Foster agrees with McNeil's assessment: "If the students go out and affect one person's life, they can say, 'I've accomplished something today.'"

Physicians' Forum

PREPARING FOR A PANDEMIC

By Caperton Gillett

In 2009 an outbreak of H1N1 influenza—"swine flu"—highlighted the strengths and weaknesses of pandemic preparedness. From policymakers at the national level to physicians in private practice, procedures and communication plans have been tested, updated, and sometimes totally rewritten.

Here, two UAB physicians share how they have prepared themselves, their practices, and their patients for a potential flu pandemic. **Nancy Dunlap, M.D.** (intern, resident, and fellow, 1981-87), former chief of staff at The Kirklin Clinic, serves as vice chair of clinical services in the Department of Medicine. **David Kimberlin, M.D.**, co-directs UAB's Division of Pediatric Infectious Diseases and was one of four U.S. doctors on the federal Safety Monitoring Committee reviewing clinical trials of H1N1 vaccines.

Nancy Dunlap, M.D.

David Kimberlin, M.D.

NANCY DUNLAP, M.D.

Luckily, the H1N1 influenza pandemic has not been as devastating as predicted. However, intense media coverage has helped us think about how to handle a serious community outbreak. Because the incubation period is short and patients usually are not sick enough to seek medical attention before they have transmitted the disease, physicians must prepare their office staffs before influenza hits the community.

While planning ahead is necessary, implementing that plan consistently can be difficult. Communicating infection control measures and the reasons behind them is the first step, but measuring compliance of physicians and staff and giving performance feedback is necessary to be successful in implementing the measures.

Communication is more difficult as physician groups get larger. At UAB, with more than 1,000 physicians, it is extremely difficult to get everyone to read e-mails or publications or to attend lectures. We must rely on nurses and staff to educate physicians while they are in clinic caring for patients. Interestingly, compliance with these measures is probably easier in large clinics, such as The Kirklin Clinic, where manpower is available to assign specific tasks to individuals and there are people who monitor compliance. Clinics accredited by agencies such as the Joint Commission typically have worked out processes for developing policies, communicating changes, monitoring compliance, and giving individual feedback. Smaller clinics must have everyone in the group committed to infection-control measures. This is very difficult when people have multiple tasks, clinics are busy, and compliance interrupts the usual flow of activities.

Planning ahead and implementing some of these measures prior to an influenza outbreak will make it easier to ramp up efforts when needed. In infection control, practice really does make perfect.

DAVID KIMBERLIN, M.D.

The response to what is now recognized as the 2009 H1N1 swine flu pandemic has been years in the planning. After the 2001 terrorist attacks, the government began developing emergency-response plans for a number of potential acts of bioterrorism, including pandemic influenza preparedness. When H1N1 was recognized in April 2009, response plans were ready to be adapted and implemented.

For the most part, things went very well with the country's response. The new virus was identified rapidly and sequenced and was found not to contain two key genes that had made the 1918 Spanish influenza strain so lethal.

In the initial weeks, though, public-health officials in the United States and Mexico realized that a lot of people were dying. What wasn't known was the denominator to which this numerator should be compared—that is, how many Mexicans had actually been infected with the virus? Initial estimates had a mortality rate of around 6 percent, compared to a 2.5 percent mortality rate with the 1918 pandemic, which killed up to 100 million people worldwide. Thankfully, the 2009 H1N1 mortality rate is much lower. However, this was not known in the late spring and summer, and officials prepared for the worst and hoped for the best. Within six months of the virus being recognized, millions of doses of vaccine were rolling off pharmaceutical production lines worldwide.

The ultimate challenge has been conveying the message that key groups of high-risk individuals should be vaccinated but that most people will not die from the disease. While we in the medical community can understand this, the public clearly became confused. When lessons are learned from our efforts during the pandemic's early months, I suspect that knowledge of what does and does not work from a public-relations standpoint will top the list.

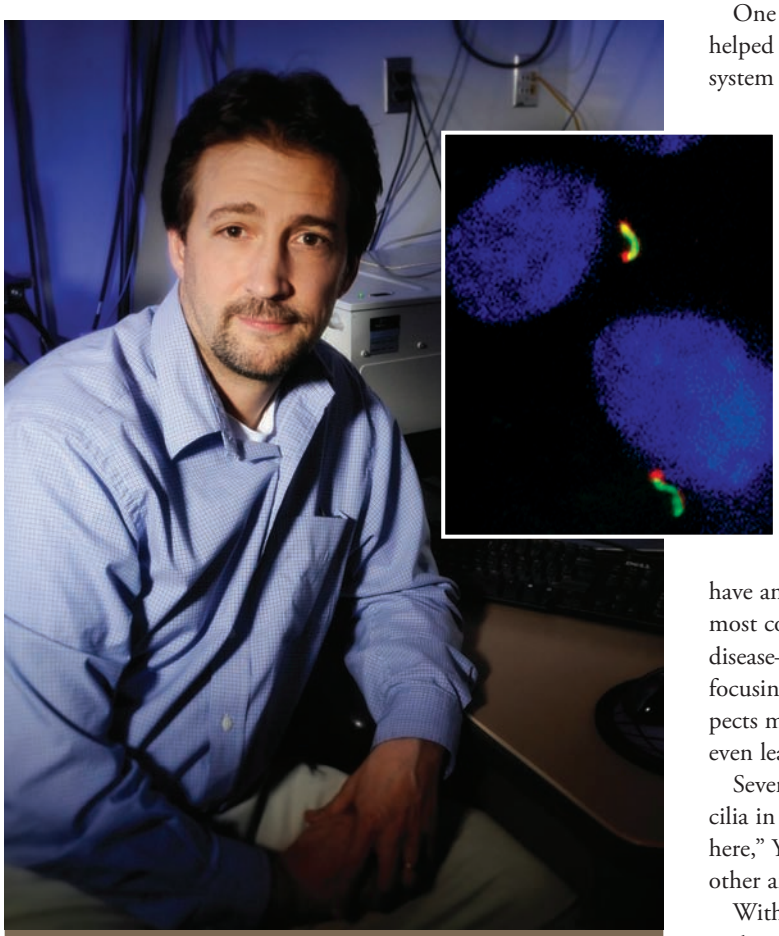
Trailblazer

Bradley Yoder

By Matt Windsor

One benefit of doing science in an unexplored field is that you have plenty of freedom to choose your ground. For more than a decade, Bradley Yoder, Ph.D., a professor in the UAB Department of Cell Biology, was among only a handful of scientists who were actively investigating the role of a lightly esteemed, poorly understood organelle known as the primary cilium in disease, development, and health. Then Yoder's research helped link cilia to a major human disease—and suddenly his field of study grew from a sleepy backwater into a boomtown.

Unlike the familiar hairlike cilia found in the trachea, primary cilia are immotile. And they're everywhere; most cells in the human body have one. "Scientists have been aware of primary cilia since the late 1800s," Yoder says, "but up until about 10 years ago, people thought they were vestigial remnants." That is, until the discovery that a mutation in primary cilia is behind polycystic kidney disease, one of the most common human genetic disorders.



Research led by Bradley Yoder has linked primary cilia (inset) to obesity, polycystic kidney disease, and cancer.

Cilia Secrets

Kidney cells orient their cilia into the lumen of kidney nephrons, Yoder explains. The cilia bend in the flow, acting as a gauge of urine levels. If the cilia fail to bend—or if they aren't there in the first place—cysts form that eventually compromise kidney function.

Yoder's lab has been a leader in investigating cilia and kidney disease, and though it did not break the news about the connection between them, it has been front and center in several other key discoveries. It was among the first to demonstrate that cilia defects lead to the loss of a satiation response. While the specific receptor on the cilia is still not known, mice with defective cilia fail to receive satiety signals and overeat to the point of extreme obesity. Obesity is also a hallmark of several cilia-related human syndromes.

Receiving signals—and possibly sending them—seems to be one of the cilia's main functions. "I think it's a way of concentrating receptors and channels and the signaling molecules for various pathways in a very small domain," Yoder says.

One of those pathways is known as hedgehog, and as Yoder's lab helped demonstrate, it's a very important developmental signaling system that also plays a major role in adult mammals. Cells without cilia "can no longer respond to the hedgehog ligand," Yoder says. Because hedgehog defects are responsible for basal cell carcinoma—one of the most prevalent forms of cancer in humans—Yoder says that cilia-based therapies could eventually be a new frontier for cancer treatment.

Progress from the Pond

The possibilities of more cilia connections in human disease are attracting attention from researchers around the world—not bad for a field that a few years ago was concentrating largely on green algae, Yoder notes. "You never know when fundamental discoveries coming from these model organisms are going to have a huge impact on human-relevant science and medicine," he says. "Who would have thought that working on green algae would have any type of relevance to human disease? And here one of the most common diseases associated with humans—polycystic kidney disease—is due to loss of ciliary function." Yoder's group is now focusing on another promising area: neuronal cilia, which he suspects may be involved in the regulation of mood and behavior, and even learning and memory.

Several investigators at UAB have begun to look at the role of cilia in other tissues and diseases. "We are starting to build a group here," Yoder says. "It's nice to see cilia research metastasize into other areas."

With his once-derided organelle now in a "renaissance period," Yoder is expecting more discoveries—and a little respect. "Most people don't ever hear about primary cilia throughout their education," he says. "I think that's going to change."

Student Rounds

PREPARING FOR RESIDENCY

By Jennifer Ghandhi

On March 18, fourth-year medical students across the country stood in front of family and friends in anxious anticipation, waiting to open an envelope revealing where they will spend the next three to seven years. Initiated in 1952, Match Day is the climax of a long process to pair medical-school graduates-to-be with teaching hospitals for residency training. Along the way, students must contemplate the location, strength, and competitiveness of their possible choices—as the specialty programs, in turn, evaluate them. Fourth-year students **Starr Smith, Terrence Pugh,** and married couple **Josh and Ginger Menendez** share their experiences hunting for a residency and describe how the School of Medicine prepared them for the task.

Fourth-year students (left to right) Josh and Ginger Menendez, Starr Smith, and Terrence Pugh spent up to a year preparing for the Match.

How does Match work? What did you know about the matching process before you started researching programs?

Josh Menendez: The Match is like sorority rush—actually, I have heard that the algorithm used in the Match is the same one used to place girls in sororities. Applicants upload materials to a Web site and designate programs where they wish to apply. The programs download the applications and decide whom they wish to interview. Interviews last from November through January for most specialties, and then candidates and programs submit a rank list to the Match. The computer takes over and places applicants with programs, and everyone finds out where they are going in March. I started talking to friends about the process early, in the year ahead of my Match, because I knew that I was entering a competitive field and that I would have to go through the couples Match.

Ginger Menendez: The couples Match lets two people, often husband and wife, link their rank lists so that they will be at the same spot on the list. By doing this, a couple can guarantee that they will end up in the same city. Couples generally must interview at and rank more programs to ensure a match.

Was it difficult to research programs and travel to interviews while keeping up with your medical schoolwork?

Terrence Pugh: Most institutions have Web sites that outline the programs fairly extensively. Most of the information is easily found there or on other Web sites that the SOM

> "The biggest challenge is the fear of the unknown. You don't know where you'll be moving, what types of people will be in your intern class, and what the program truly will be like." —Starr Smith

faculty recommended. During our fourth year, we can schedule time off rotations to attend interviews, but even when an interview came up during a rotation, my attending at the time always would let me go.

Smith: Researching programs is tough at first because there are so many, and they all start out as merely statistics on a piece of paper. The SOM advisors are incredibly helpful because they know the programs well, where students have gone before, and what each program is like. They usually can provide much more information than we could search for on our own. Traveling is definitely exhausting, but we have time built in for it. It's all a matter of how well you juggle; it just takes some scheduling.

What are the most daunting challenges of preparing for residency?

Smith: The biggest challenge is the fear of the unknown. You don't know where you'll be moving, what types of people will be in your intern class, and what the program truly will be like. When we started medical school, all those ahead of us said, "You just don't know what it's like until you're in it." I think the same applies for residency. At UAB we take call as students, which is something most other schools don't do. I think that prepares us a little for what long nights and hard shifts will be like. We've worked in the clinics, hospitals, and emergency rooms, and we know all we can about the specialties we have chosen, but nothing will compare to being a resident. Currently we're all blissfully unaware, or at least ignoring, how different next year will be.

Josh Menendez: The challenges that all students face in applying for residency are determining what specialty to enter, what you want in a training program, and which programs fit your needs. Simply discovering where to find information about programs is a challenge in itself.

Ginger Menendez: In addition to these challenges, Josh and I had to find cities and institutions with programs that fit both of our needs. For us, the addition of a son to our family in November added a host of important new considerations as we evaluated programs and cities.

Matches made: The Menendez family will stay at UAB for residency training while Pugh will go to Montgomery, Ala., and then Charlotte, N.C. Smith will finish her combined M.D./Master of Public Health curriculum at UAB before matching to a residency.

How did the SOM help you prepare for the increasingly competitive Match process?

Pugh: The SOM conducts a senior class meeting at the beginning of the fourth year to explain the process. After meeting and reviewing the material that was given to us, I felt like I had a fairly good grasp on how it all works. Aside from that, the faculty and my advisor are the best resources that I've had. They are very knowledgeable about the Match process and are always available for questions. The SOM name carries a lot of weight regionally and nationally, so doing well in my classes here will go a long way.

Smith: I think one of the best things our school has done—and that any administration should do—is to be honest. Be supportive, but be honest. We need to know if we're up against the top 1 percent of graduates. Don't crush our dreams of becoming a neurosurgeon, but help us be realistic. They encourage us to reach far, but they also help us form a backup plan if we need one. There are plenty of courses and advice on how to interview, how to write a personal statement, what to wear, and what not to do. Any and all information is helpful, but it comes down to the fact that the SOM is proud of its graduates. SOM graduates are highly sought-after residents, and the school helps us navigate the process to get there.

What is your advice for future medical students as they search for residency programs?

Pugh: Before you apply, decide what attributes of a residency program are the most important to you. Whether it's location, prestige of the program, or family, know what you're looking for, but also keep an open mind. There are a lot of strong programs that might not meet all of your criteria, and you don't want to limit yourself.

The match process can be a stressful time, but the best advice I have is to enjoy it. You'll never get a chance to travel around the country like this again, so definitely make the most of it. Spend a little time in each city where you interview to make sure it's a place where you'd like to live. Medical school is a lot of hard work, but the Match is the culmination of all that work. Once you get your spot, have some fun, because the July after your graduation is when the real work begins.

Student Profile

Shelton Wright

By Shelly DeButts

A medical mystery sent fourth-year student Shelton Wright on two journeys—one to South America, and another deep into the research and practice of global health. Wright, a Fulbright Scholar, recently returned from a year in Chile, where he investigated the effects of *Helicobacter pylori* infection in children. For adults, the bacterium can cause stomach inflammation, which can lead to gastric cancer—Chile's number-one cancer killer—but for some reason, children appear to be resistant to the inflammation and its deadly consequences.

"When children are infected with *H. pylori*, they do not tend to get ulcers, and often complain of only mild stomach pain, if anything at all," Wright explains. "We showed that infected children have less inflammation in their stomachs than adults. The immune response of children seems to prevent the ulcers. Why adults respond differently and how that change occurs is unknown and something we are actively investigating."

H. pylori infection is common in countries in South America, southeast Asia, and sub-Saharan Africa. Although Chile is ahead of other South American countries in terms of development, studies show that most Chilean children will become infected before age 10. In contrast, Wright explains, children in the United States are rarely infected by the bacterium.

The reason for Chile's high infection rates is another scientific mystery—one that makes the country an ideal real-life laboratory for studying the problem, Wright adds.

Shelton Wright won a Fulbright Scholarship to study the problem of *H. pylori* in Chile.

Exchange of Ideas

A Birmingham native, Wright was exposed to the field of pediatric gastroenterology through his father, a former Children's Hospital physician. He also has nurtured an interest in global health issues. "Between college and medical school, I worked with UAB's collaborative, HIV-focused Centre for Infectious Disease Research in Zambia," Wright says. "After I returned, I connected with Dr. Phillip Doyle Smith [the Mary J. Bradford Endowed Professor in Gastroenterology at UAB], who has a collaboration with a Chilean pediatric gastroenterologist, Paul Harris, who trained at UAB. With the help of these two wonderful mentors, I completed a smaller research project in Chile during the summer after my first year of medical school."

To continue his work in Chile, Wright delayed his graduation from the School of Medicine for a year. Then he won the Fulbright Scholarship through the U.S. State Department. In Wright's program, approximately eight American students completing or planning to complete graduate school went to Chile to conduct research while several Chilean students came to the United States to study. Wright describes the program as an important cultural exchange of ideas.

"My research experience in Chile was incredible, and as I continue to work on the project at UAB, I realize how fortunate I was to have the opportunity to study and work there," says Wright. "The great part about the project is that we had a basic science question that we could answer only by collaborating with Dr. Harris and Chilean researchers. In the U.S., a perception exists that completing really good basic science research in 'developing' countries is difficult, if not impossible. This wonderful collaboration demonstrates that we can not only complete basic science research abroad, but also complete high-quality research there."

With this experience preparing him to tackle other tough questions in medicine, Wright will graduate this May. He says the SOM has fully lived up to the expectations he had for his education and training. "I knew that UAB would not only mold me into an excellently prepared physician but that the medical system could also present many tremendous opportunities for me to explore my other interests," he says. "My experiences in Chile and Zambia show UAB's global reach."

Match Day 2010

The Envelope, Please

By Bob Shepard

It was called the most competitive Match Day ever, but when all the envelopes were opened on March 18, the class of 2010 had beaten the national average. "Ninety-eight percent of our graduates matched to a program of their choice on the first round, higher than the 95 percent national average," says Laura Kezar, M.D., UAB associate dean for students. "All students had successfully matched by the end of the proceedings."

While medical-school enrollment has risen in recent years, the number of residency positions has not grown as quickly, increasing the competition. The 162 members of the class of 2010 were among approximately 16,000 U.S. medical-school seniors and 15,000 osteopathic or foreign graduates in the Match.

Kezar notes that "52 percent of our graduates matched in one of the primary-care fields, our highest percentage in years." Eighteen percent will go into a surgical field, 7 percent into obstetrics and gynecology, 6 percent into anesthesiology, and 5 percent into radiology. UAB's graduates will do residencies at 69 hospitals in 29 states; 40 percent of graduates in all specialties will remain in Alabama for residency training, and 76 percent will stay in the Southeast.

Online Extra:

Visit Medicine.uab.edu/matchday to experience the excitement of Match Day through a video, additional photos, and the Match results.

Tuscaloosa Report

Fellowships Extend the Reach of Family Medicine

By Leslie Zganjar

The University of Alabama College of Community Health Sciences is responding to health care's changes by offering more fellowships for family medicine physicians. The college, which is also the School of Medicine's Tuscaloosa branch campus, provides the fellowships through the Tuscaloosa Family Medicine Residency Program; each fellowship adds one year of training following three years of a residency.

"While these fellowship programs benefit the individuals who pursue additional training, they also benefit all of our residents and students with the educational infrastructure they provide," says college Dean E. Eugene Marsh, M.D. "Clearly, these programs represent 'value added' for all of our trainees and future patients."

Improving Their Game

A recent survey of family medicine physicians shows 45 percent serving as team physicians in one or more sports. To help future physicians fill that role, the college's Sports Medicine Fellowship will welcome its first fellow this summer, offering education, training, and certification in state-of-the-art sports-medicine care. Fellows will work with University of Alabama athletic team physicians, coaches, trainers, and athletes and between and during university sporting events.

Marsh says the fellowship will benefit the university and its athletes and provide additional training "that will be felt in community sports programs as fellows graduate and establish their practices throughout Alabama and the region."

The Sports Medicine Fellowship is the culmination of several years of work by the college and the University of Alabama Department of Intercollegiate Athletics. The fellowship is part of the college's Dr. Patrick Lee Trammell Sr. Excellence in Sports Medicine Program, named in honor of the quarterback who led the Crimson Tide to the 1961 national championship. Trammell received his undergraduate degree from the University of Alabama in 1963; three years later, he graduated from the School of Medicine. As he prepared to start his residency, he was diagnosed with cancer and died at the age of 28 in 1968.

An endowed chair will be established to recruit a nationally known sports medicine physician to lead and strengthen research and training.

Hospital-Based Training

The college's yearlong Hospitalist Fellowship offers training at Tuscaloosa's DCH Regional Medical Center (DCH RMC), a tertiary-care facility with more than 580 beds. University of Alabama Hospitalists Group physicians, all of whom are college faculty, care for more than 50 percent of DCH RMC inpatients. The fellowship began in 2008 and had its first graduate, Neal Honea, M.D., last year. The Emergency Medicine Fellowship is another yearlong program based at DCH RMC. A level II trauma center and regional referral center, DCH RMC's emergency department is one of the five busiest in Alabama, treating approximately 70,000 patients a year.

The fellowship, a collaboration between the college and Tuscaloosa's Northriver Emergency Physicians, began in 2008. Its goal is to provide clinical and procedural training and experience so that family-medicine physicians can practice emergency medicine more comfortably, says fellowship director Elwin Crawford, M.D.

Preparing for Rural Practice

The Rural Residency Training Track, also established in 2008, enables resident physicians to gain 24 months of hands-on experience in a rural clinic in Centreville, Alabama. It is the state's first family-medicine residency to provide an accredited rural training track, says residency director John Waits, M.D. He adds that the first rural-track resident, Michael Luther, M.D., plans to practice in a rural Alabama community after his June graduation.

Linsey Williams, M.D., a 2009 graduate of the Tuscaloosa Family Medicine Residency Program, is the current ob/gyn fellow.

The college has offered an Obstetrics Fellowship since 1986. The fellowship was developed by Paul David Mozley, M.D., then chair of the college's Department of Obstetrics and Gynecology and now professor emeritus, to address the overwhelming need for obstetric care in rural and remote areas. During the yearlong program, fellows master high-risk, operative obstetrics and office obstetric and gynecologic procedures, including ultrasound, colposcopy, cryotherapy, and endometrial biopsies.

Fellowship Director Dwight Hooper, M.D., says that as the attrition of obstetricians and gynecologists in the United States exceeds the number of ob/gyns completing residencies and entering general practice, programs that train family-medicine physicians to provide quality obstetrical care will continue to grow in importance.

Huntsville Report

Immunization Innovation

By Ralph C. Samlowski, M.D., Associate Professor of Family Medicine

The UAB Huntsville Family Medicine Residency Program is marking the milestone of a 90 percent or greater immunization rate for 19- to 35-month-old children. In 2008, the program received an Immunization Award from the American Academy of Family Physicians (AAFP) Foundation and Wyeth Vaccine, now a Pfizer subsidiary.

Marsha Daniell, M.D., assistant professor in family medicine and UAB Huntsvile Family Medicine Center (FMC) medical director, says the award is designed to improve immunization rates of underserved children. The UAB Huntsville Family Medicine Residency Program received $10,000 to begin a new system in September 2008, with full implementation throughout 2009. Resident Duriel Gray, M.D., also received a $4,000 travel scholarship to attend the AAFP National Conference of Family Medicine Residents and Students and the AAFP Annual Scientific Assembly to present a poster on the Huntsville project.

"Our grant application and system implementation represented a collaboration of physicians, office and medical-record managers, clerical and medical staff, and information systems and data support personnel," Daniell says. The resulting plan has focused on improving immunization knowledge, documentation, and missed opportunities.

Information and Communication

To boost patient knowledge, the FMC created educational packets for parents of patients up to 18 months, as well as new 19-to-35-month-old patients with incomplete immunizations. Colorful booklets highlight immunization indications and benefits, along with risks, precautions, and side effects. They describe vaccine-preventable diseases and address potential concerns, including vaccine mercury content and the autism-risk controversy. Information about the Vaccines for Children program helps address any financial concerns.

To increase clinical knowledge, faculty, residents, and medical-center staff completed immunization pre- and post tests throughout the year. All physicians and patient care/teaching areas received child and adult immunization schedules. Medical staff also received regular updates and education. Awards spotlighted nurses who gave the highest number of immunizations and physicians at each training level whose patient visits yielded the highest immunization rates.

For documentation, staff used the Alabama Immunization Registry (ImmPrint) and the Huntsville electronic medical record (EMR) to identify targeted children with missing immunizations. A staff member reviewed paper and electronic charts to verify documentation transfer.

The staff emphasized the documentation of newborn hepatitis B immunizations, which usually occur in the hospital at birth and may not be in the EMR. They also added reminders to EMR well-child visit templates to encourage immunization review and documentation. The FMC provides parents with updated immunization cards or copies of the current record at every immunization visit and upon request.

No Missed Opportunities

Daniell says that the new system significantly reduces missed opportunities. A reminder to check immunizations automatically prints under names of patients in the target population on daily physician schedules. Standing orders for all child and adult vaccinations ensure that patients receive them when they visit the FMC for any reason. The center also sent postcards to parents of children with missing immunizations and added alerts to their medical records, then held an immunization clinic to encourage visits. Both efforts prompted many parents to schedule visits and provide vaccination information.

After one year using the new system, the FMC has exceeded its goals. Childhood immunization rates among the target population have risen to 92-97 percent from 77-88 percent for individual vaccines and to 85-92 percent from 71-83 percent for vaccine series. Immunization rates of older children and adults also have increased. The FMC plans to continue using the new system and monitor target-population immunization rates to maintain the 90 percent level.

Immunization grant group collaborators include (left to right) research director Tom English, Ph.D.,; family medicine office associate Terri Harris; assistant professor Laura Satcher, M.D.; FMC office manager Saundra Miller; FMC medical director Marsha Daniell, M.D.; medical records director Jennifer Childress; EMR trainer/analyst Emily Levine; and senior resident Duriel Gray, M.D., along with other faculty and residents.

Positive Developments

Additions and Promotions Strengthen Team

By Lisa C. Bailey

Recent promotions and new assignments in the School of Medicine's development staff underscore its guiding principle: teamwork. "SOM development is an integral part of UAB's overall development efforts and vital to maintaining our excellence in education, patient care, research, and community outreach," says **Shirley Salloway Kahn, Ph.D.**, vice president for development, alumni, and external relations. "We are so fortunate that so many friends and grateful patients support the SOM's growth, and we have the right people in the right place to help our donors best apply their resources to meet the school's most pressing needs."

"Because we emphasize collaboration and collegiality, there is tremendous leveraging power on this team," says **Rebecca J. Gordon**, UAB assistant vice president for development. "Our development staff has experience in working with all types of fundraising techniques, which allows them to take advantage of some unique opportunities to assist our physician-scientists in finding much-needed resources. And because many SOM projects cross department lines, our development directors partner rather than compete. The goal is the same: connecting donors to projects that give them the opportunity to express their gratitude to UAB."

• As the SOM's new executive director of development, **Virginia Gilbert Loftin** now coordinates the efforts of the development professionals in the SOM's departments, centers, and programs. She also still handles major gift efforts for the Department of Medicine (DOM). "If I've learned anything at UAB, it's that leadership is the difference that elevates good to great. I have worked and continue to work under great leaders at UAB, so I hope to pay that forward as executive director," she says. "I love my hands-on development work, too, which involves connecting people to causes we both care about, which in turn benefits sick folks, helps educate physicians, and supports the research enterprise."

Virginia Gilbert Loftin

Tom Brannan

• **Tom Brannan**, now senior development director in the Department of Neurology, is developing research acceleration funds for all divisions, which allow the department's scientists to pursue novel ideas and expand ongoing research, he says. "Philanthropic funds are also enabling us to recruit the best and brightest young neurologists as well as pre- and postdoctoral students to UAB, where they are making significant contributions to our work in memory and movement disorders."

Sherri Van Pelt

• As a cancer survivor and now senior director of development and community relations for the UAB Comprehensive Cancer Center, **Sherri Van Pelt** feels a personal commitment to eliminating cancer as a major public health problem. "As one of only 40 National Cancer Institute-designated cancer centers nationwide, we are among the few that do not yet carry the name of a donor," she says. "I look forward to meeting the individual with the passion and commitment to name our cancer center. This partnership will ensure that UAB continues to lead in cancer breakthroughs."

• In September 2009, development director **Jeannie Horton** moved from the Department of Surgery to join Van Pelt at the Comprehensive Cancer Center, where her initial focus is support for GI oncology.

Jeannie Horton

"We have assembled a group of local leaders to form the Community Partnership for Advancements in GI Oncology at UAB, with a goal of $5.5 million," she says. "Beyond that, I am working toward a comprehensive development plan that will coordinate and enhance all philanthropic giving for cancer-related purposes at UAB."

Chris Thomason

• **Chris Thomason**, who replaced Horton as development director for the Department of Surgery, focuses on funding endowed chairs in neurosurgery, transplantation, and cardiothoracic surgery. "I'm also working on finding funds for research and resident education in each of these areas," he says. "As a UAB graduate, it's quite rewarding to have returned to campus, where I hope to make a significant contribution to the effort to recruit, train, and retain the country's top surgeons and researchers."

Erica Hollins

• Multiple roles as development director for the UAB Comprehensive Diabetes Initiative and the Montgomery Internal Residency Program—and now executive director for the Medical Alumni Association—keep **Erica Hollins** busy. Hollins says that in her newest role, she enjoys "personally connecting with our alumni and providing new and innovative opportunities for them to reconnect with the SOM."

Evelyn Jones

• Development Director **Evelyn Jones** still handles fund-raising for medical-student scholarships, the UAB Osteoporosis Prevention and Treatment Clinic, and the Selma Family Medicine Residency Program. She now also coordinates the institutionwide Grateful Patient Program. "Each of these programs provides donors with opportunities to connect with UAB funding needs that are meaningful to them," she says.

Ivy Watson

• In December, Development Director **Ivy Watson** came from the School of Nursing to the SOM to launch the Friends and Family Program, a component of the Grateful Patient initiative. "I visit friends of the university when they are in the hospital or clinic and look for ways to ensure the comfort of the patient and/or the family while they are with us," she says. Going forward, she hopes to continue building links between the university and its donors and families through this personal attention.

Lindsay Knox

• **Lindsay Knox**, development director for the Department of Ophthalmology, now also focuses on fund-raising for the Callahan Eye Foundation Hospital. "We are committed to developing the most effective treatments for eye disorders, educating physicians and the public to improve visual health, and offering eye treatments that are not available anywhere else in Alabama or the region," she says.

Eve Rhea

• **Eve Rhea**, development director in the Department of Psychiatry and Behavioral Neurobiology, is raising funds to build a mood disorders research program and endow a chair in child and adolescent psychiatry. "One of my major tasks is to help break down the stigma associated with mental illness by getting our faculty members into the community to speak on various issues, and by publishing a departmental magazine," she says. "We also have formed partnerships with local and national mental-health organizations to team up on events and community-awareness forums."

Sabrina Latham

• **Sabrina Latham**, who has overseen the SOM Annual Fund and Hill Society, has moved to the university development office to help with prospect research and management. "I love being a behind-the-scenes team member," she says. "My goal is to help the university's development directors and major gift officers develop new relationships and strengthen ties to our existing constituent pool."

Samika Williams

• As DOM major gifts officer, **Samika Williams** works with the Liver Center; the Center for Aging; the Internal Medicine residency program; the MHRC Young Professionals Board; and the divisions of Pulmonary, Allergy and Critical Care Medicine, and Hematology and Oncology. "I look forward to completing an endowment campaign for pulmonary medicine, and to garnering support to help the hematology and oncology division recruit a scientist who will make a significant impact in advancing translational opportunities," she says.

Katrina Marshall Watson

• **Katrina Marshall Watson**, also a DOM major gifts officer, works with the Minority Health and Health Disparities Research Center's annual fall gala, chaired by Charles Barkley, and also helps the MHRC Young Professionals Board with its All In Casino Royale event to benefit Healthy Happy Kids, which promotes healthy eating habits and physical exercise among elementary-school children. She recently added regional development to her responsibilities and will be making visits to UAB and SOM graduates around the Southeast.

Kristen Farmer Hall

• **Kristen Farmer Hall**, associate director for the UAB Center for Palliative Care, continues to raise awareness and funds for the center. "Our goal is to continue transforming care for those with serious illness through expansion of our inpatient and outpatient clinical services; conducting research on how to best care for patients and families facing complex illness; and educating and training talented physicians, nurses, students, and interdisciplinary team members about palliative and supportive care," she says.

Coming Home

Donors and Students Reconnect at Scholarship Dinner

By Lisa C. Bailey

The School of Medicine's annual Scholarship Dinner has changed in four years, becoming a cherished event, says Robert R. Rich, M.D., senior vice president and dean. "When we planned our first dinner, we wanted to show our donors how much we value the support you show our students, our school, and our community by investing in medical education," he said as he welcomed guests to the 2010 edition. "Now, this gathering has become something of a homecoming celebration—a time when our generous donors have the opportunity to reconnect with our students and each other."

At the January 21 event, 240 scholarships totaling $2.4 million were presented. H. Hughes Evans, M.D., senior associate dean for medical education, introduced student speakers Zsu Zsu Chen, Ann Margaret Clark Scholarship recipient and Comer Foundation Scholar; Forest Huls, School of Medicine Dean's Scholar; and Mutende Sikuyayenga, W. Hudson Turner Scholarship recipient, who each shared their gratitude and highlights of their educational experiences. Attendees also enjoyed music by Infusion, a medical-student a cappella group, and a collection of artwork from the SOM student, faculty, and resident art show.

"Within the national debate on healthcare reform, the issue of student debt continues to be of great concern," Rich noted. "According to the latest information from the Association of American Medical Colleges, 87 percent of medical students carry a heavy debt load. Further decreases in state budgets and the increasing cost of medical education mean that the support we receive from donor contributions means even more. Your gift to the scholarship program in the School of Medicine supports one of the finest academic health institutions in the world. Know that our leadership role magnifies the impact of every discovery, every new approach to medical education, and every evolution in better patient care, and this allows us to honor the legacy and spirit of your gift."

Left: Alicia Waters, Carla Heath, Jennifer Baraba, and Carla Gale
Below left: James Sokol, Edwin Mwakalindile, and Lydia Cheney
Below: Betty Bell, Scott Bell, Mannie Corman, Frances Bell, and Maurice "Red" Bell

Above: Sherri Moultrie, Bianca Williams, Connie Williams, Joffre Johnson, Barbara Luckett, Andrea Luckett, and Osamuede Osemwota
Above right: Shilpa Reddy, Ann Clark, Allen Clark Jr., and Zsu Zsu Chen
Above left: Zsu Zsu Chen, Mutende Sikuyayenga, Dean Robert Rich, and Forest Huls

Living History

Kennamer Lecture Honors James Kirklin

By Lisa C. Bailey

James E. Kirklin

James E. Kirklin, M.D., professor of surgery and director of UAB's Division of Cardiothoracic Surgery, featured the history of surgical treatment for advanced heart failure in the 2010 S. Rexford Kennamer, M.D., Distinguished Lecture, sponsored by UAB Health Center Montgomery, on April 1.

Known for his surgical expertise, Kirklin helped establish UAB's heart and lung transplant program as one of the world's leaders. He was instrumental in the formation of the Cardiac Transplant Research Database and the Pediatric Heart Transplant Study, both headquartered at UAB. He also is principal investigator of the Interagency Registry for Mechanically Assisted Circulatory Support (INTERMACS), a national registry that tracks patients who are receiving mechanical circulatory support device therapy to treat advanced heart failure. At UAB Kirklin holds the John W. Kirklin Chair of Cardiovascular Surgery, named for his father.

Kirklin was elected president of the International Society for Heart and Lung Transplantation for 2010. For nine years, he has served as editor of the organization's *Journal of Heart and Lung Transplantation*. Kirklin is listed in *The Best Doctors in America* and as one of the "best doctors" in cardiac surgery by *Good Housekeeping*, *American Health*, and other publications.

According to Wick Many, M.D., program director for UAB Health Center Montgomery, Kirklin will be the eighth UAB faculty member honored in the annual lecture series—the first being Kirklin's father in 1979. "The event's mission is to bring internationally recognized leaders in health care to present their views and insights on topics of relevance to both the medical and nonmedical Montgomery community," Many says.

Since 2005, the lecture has been supported by an endowment provided through the generosity of S. Rexford Kennamer, M.D., a Montgomery native who was an esteemed cardiologist in California for more than 50 years. Now retired, Kennamer has moved back to Montgomery and continues to support the medical education, patient care, and service mission of UAB Health Center Montgomery.

Eye on Washington

UAB Ophthalmologist Briefs Congress on Glaucoma

By Lisa C. Bailey

As part of World Glaucoma Awareness Week, Christopher Girkin, M.D., a professor in the Department of Ophthalmology and director of the UAB Optic Nerve Imaging Center, discussed the latest research on the disease at a Congressional briefing conducted by the nonprofit Alliance for Eye and Vision Research (AEVR). The event preceded the third World Glaucoma Day, a joint initiative of the World Glaucoma Association (WGA) and the World Glaucoma Patient Association (WGPA).

Though World Glaucoma Day is always March 12, this year the WGA and WGPA expanded it to create Glaucoma Awareness Week. The change is designed to maximize global and local awareness efforts to help patients with glaucoma, a primary cause of vision loss. Jason Swanner M.D., UAB associate professor of ophthalmology, acted as the local representative for Glaucoma Awareness Week.

In his talk, Girkin emphasized the African Descent and Glaucoma Evaluation Study, funded by the National Eye Institute to identify factors accounting for differences in glaucoma onset and rate of progression between individuals of African and European descent. Girkin, the project's lead investigator, noted that African Americans over age 40, and all adults over age 60, especially Latinos, have a higher risk for this disease. The briefing was associated with AEVR's Decade of Vision 2010-2020 Initiative, a congressionally acknowledged educational effort that recognizes the benefits of federally funded vision research.

"World Glaucoma Day provides an opportunity for us to spotlight the amazing work UAB is doing in glaucoma research," says Lindsay M. Knox, director of development for UAB's Department of Ophthalmology and Callahan Eye Foundation Hospital. "Our glaucoma specialists are internationally recognized, and it is truly an honor for Dr. Girkin to speak to Congress as a leader in the field. Alabama has many gems like Dr. Girkin, and we are fortunate he chose UAB to provide the absolute best in patient care, education, and research."

Alumni Weekend 2010

By Lisa C. Bailey and Charles Buchanan

The 37th annual Medical Alumni Weekend drew guests from all over Alabama and the nation for two days of education and fellowship. Held February 19-20 at the Birmingham Marriott, the weekend included these highlights:

Clockwise from top: U.S. Surgeon General Regina Benjamin; Greg Skipper; Sandra Lewis and Richard Walker; Werner Knurr with Louise and Robert Lokey; Jarvis Ryals and Tennant McWilliams; Charles "Scotty" McCallum Jr. and Mike Wilkerson

Reynolds Historical Lecture

Tennant McWilliams, Ph.D., UAB professor of history, presented the 31st annual Reynolds Historical Lecture. Titled "Alabama's Defining Moment: A Public Medical College Comes to Birmingham," his talk explored the School of Medicine's 1946 move, which sparked the growth of the medical center and made Alabama a leader in research and clinical care. A reception sponsored by the School of Medicine Dean's Office followed the lecture.

Scientific Program

University of Alabama Medical Alumni Association president Theodis Buggs, M.D., opened the Scientific Program, which focused on physician health and well-being in Alabama. The first topic was the Alabama Physician Health Program; its medical director, Greg Skipper, M.D., and assistant medical director, Jim Alford, M.D., gave an overview of the program and its two decades of assisting troubled physicians. Mike Wilkerson, M.D., medical director of Bradford Health Services, an addiction-treatment provider, discussed "The Hungry Brain"—substance abuse among physicians—and Skipper returned to the podium to explore disruptive behavior among physicians.

Later, Steve Schenthal, M.D., director of Professional Boundaries, an educational resource center, described those professional boundaries and ethics—and how physicians can protect their practices from violations. Sandra Frazier, M.D., the UAB Health System's physician resource officer, followed with a presentation titled "Maintaining Balance in a Tilted World." Steve Furr, M.D., of the Board of Medical Examiners, then outlined the "10 Commandments" of medical licensure.

Annual Alumni Awards

WILLIAM J. "JEFF" TERRY, M.D.
Distinguished Service Award

For superior accomplishments and contributions to the School of Medicine


Jeff Terry

W. Jeff Terry, M.D., graduated from the School of Medicine in 1979 and completed his urology residency at UAB in 1984. He has practiced pediatric and adult urology in Mobile, Alabama, for 25 years and is a member of Urology & Oncology Specialists P.C.

In 1989, Terry helped start Alabama's Young Physicians Section along with Regina Benjamin, M.D. He joined Alabama's American Medical Association (AMA) delegation in 1995 and was on the AMA council on medical service from 2004 to 2008. He presently serves as chair of Alabama's AMA delegation.

A Medical Association State of Alabama (MASA) life counselor, Terry served as vice president of MASA from 2002 to 2003. He also has been president of the Alabama Urology Society and the Mobile Young Physician Society and chair of the Alabama Independent Physicians Association.

Terry received the alumni association's Garber Galbraith Medical-Political Service Award in 2007. He is currently a member of a coalition of state and national medical societies offering ideas and leadership to solve the nation's health-care access problem.

ELLEN L. MARMER, M.D.
Hettie Butler Terry Community Service Award

For outstanding commitment to community service

A 1964 graduate of the School of Medicine, Ellen L. Marmer, M.D., has a full-time pediatric cardiology practice in Vernon, Connecticut, a town of 30,000 where she served as mayor from 2003 to 2007. She also is the sports physician for Rockville High School and teaches occasionally at Yale University.


Ellen Marmer

Marmer, who completed her residency and internship at Upstate Medical Center in Syracuse, New York, and a fellowship at New York City's Columbia Presbyterian Medical Center, has served as vice president of the American Heart Association (AHA) and is a member of the Connecticut State Medical Society. She completed two terms on the Vernon Town Council before being elected mayor.

Marmer received the AHA Outstanding Contribution Award in 1988, the AHA Outstanding Volunteer Award in 1989, the AHA Outstanding Service Award in 1992, and an International Women of the Year Award (1991-1992). She was a volunteer physician at the U.S. Olympic Training Center in Lake Placid, New York, in 1997. In 2004-2005 the Consumers' Research Council of America named Marmer a Top Physician in its *Guide to Top Physicians*.

CHRISTOPHER J. E. SMYTHIES, M.D.
Garber Galbraith Medical-Political Service Award

For outstanding service to the medical profession


Christopher Smythies

A native of Britain, Christopher J.E. Smythies, M.D., earned his medical degree from the School of Medicine in 1983. For the past 17 years, he has worked in private practice as a neurosurgeon in and around Seattle, Washington.

Following a neurosurgery residency at UAB, Smythies volunteered for the United States Army and was stationed in Landstuhl, Germany. In 1990 he was deployed to Saudi Arabia, where he served as chief of neurosurgery at the 12th Evacuation Hospital during the Persian Gulf War. He received the Army Commendation Medal for serving with distinction in a combat zone.

In 1998, he founded and served as the first president of Neurosurgical Consultants of Washington, the state's largest group of private neurosurgeons. He also founded and serves as chair of the American Society of Certified Medical Experts.

Smythies also enjoys fiction writing. His book, *The Hall Chair: A Satirical Novel on the Medical Malpractice Crisis in America*, was published in 2006.

IRA L. MYERS, M.D.
Distinguished Alumnus Award

In recognition of outstanding contributions in the field of medicine and demonstration of the high principles of the medical profession

Ira L. Myers, M.D., became well known throughout Alabama as the state health officer from 1963 to 1986. He served longer in that position than any other health officer in the state's history.

Myers graduated from the School of Medicine in 1949 and later earned a Master of Public Health degree from Harvard University. He completed an internship with the United States Public Health Service in Seattle, where he participated in field trials of the Salk polio vaccine. Myers moved to Montgomery and joined the Alabama state health department in 1955.

Myers, elected to the Alabama Academy of Honor, died in 2008. The Alabama Public Health Association has named its award for excellence in public health in his honor.

SAVE THE DATE

Mark your calendar for Alumni Weekend 2011, February 18-19 in Birmingham.

REGINA M. BENJAMIN, M.D., M.B.A.

Distinguished Alumnus Award

In recognition of outstanding contributions in the field of medicine and demonstration of the high principles of the medical profession

Regina Benjamin

Regina M. Benjamin, M.D., M.B.A., is the 18th surgeon general of the United States Public Health Service. A Daphne, Alabama, native, she graduated from the School of Medicine in 1984 after attending Morehouse School of Medicine. Benjamin completed a family practice residency at the Medical Center of Central Georgia and later earned an M.B.A. from Tulane University and five honorary doctorates.

Benjamin is founder and former CEO of the Bayou La Batre Rural Health Clinic in Alabama and immediate past chair of the Federation of State Medical Boards of the United States. In 1995, she became the first physician under age 40 and the first African-American woman to be elected to the American Medical Association Board of Trustees. In 2002 Benjamin became president of the Medical Association of the State of Alabama, making her the first African-American female president of a state medical society in the United States. President Barack Obama nominated her for surgeon general in 2009.

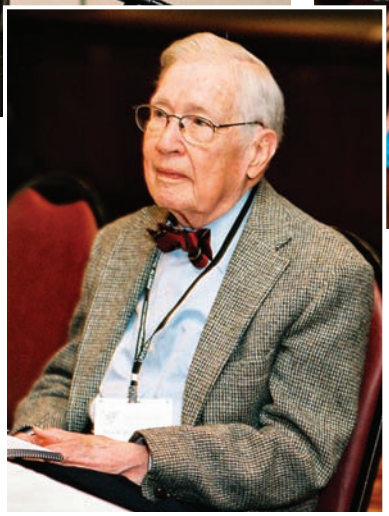
Benjamin's numerous board memberships include the Kaiser Commission on Medicaid and the Uninsured and Morehouse School of Medicine. In 1998 she was the United States recipient of the Nelson Mandela Award for Health and Human Rights. Benjamin also has received the 2000 National Caring Award, which was inspired by Mother Teresa; the *Pro Ecclesia et Pontifice* honor from Pope Benedict XVI; and a MacArthur Genius Award Fellowship.

IN MEMORIAM:

Constance S. Pittman, M.D.

Betty Ruth Speir, M.D., prefaced the lecture named for Constance S. Pittman, M.D., by reflecting on the life of the UAB professor emerita, who passed away on January 15 at the age of 81. A native of China who began her health-care career in a makeshift operating room during World War II, Pittman became an endocrinologist and world-renowned leader in the fight against iodine deficiency, a preventable cause of mental retardation, working with Kiwanis International, the United Nations Children's Fund, and the U.S. Fund for UNICEF to raise funds for clinical, research, and educational efforts. The Harvard Medical School graduate came to Birmingham

Above: Regina Benjamin with Birmingham Mayor William Bell
Above right: Mike Wilkerson
Right: Gerhard Boehm



Above: Betty Ruth Speir
Left: Frank Waldo

and the School of Medicine in 1961; she was the wife of James A. Pittman, M.D., former SOM dean. The fall/winter 2010 issue of *UAB Medicine* will feature more on Constance Pittman's life and contributions to health care.

17TH ANNUAL CONSTANCE S. AND JAMES A. PITTMAN LECTURE

Regina M. Benjamin, M.D., M.B.A.

In her speech to the alumni, Surgeon General Benjamin shared several anecdotes and experiences from her career leading a rural health clinic in Bayou La Batre, Alabama, that has faced challenges ranging from hurricanes and fire to a sluggish economy and a large population of uninsured patients. She encouraged her colleagues to always reach out to patients who are less fortunate, reminding them that their care and compassion can make a lasting impact on patients' lives. (See page 14 for more on Benjamin and her speech.)

CLASS REUNIONS

On the evening of February 20, the classes of 1947, 1950, 1955, 1956, 1958, 1960, 1965, 1970, 1975, 1980, 1985, 1990, 1995, and 2000 reunited for a joint reception followed by separate dinners at the Birmingham Marriott. The Medical Alumni Association thanks class chairs Robert Adams, M.D.; John Ashurst, M.D.; Maude Diseker Collier, M.D.; Sara Crews Finley, M.D.; Wayne Finley, M.D.; Milton Hutson, M.D.; Clarence McDanal, M.D.; Doris Phillips, M.D.; Martha Pugh, M.D.; Seenu Reddy, M.D.; Brian Sims, M.D.; and Frank Waldo, M.D., for all of their work in helping to organize the reunions.

ALUMNI LET US HEAR FROM YOU

Please take a few minutes to share with us any personal or professional news for possible publication in a future issue of *UAB Medicine.*

Name _____ Today's date _____ Year graduated _____ Specialty _____

Home address _____ Business address _____

Phone (H) _____ (W) _____ E-mail _____ Fax _____

Spouse's name _____ Children (if recent, include date of birth) _____

Personal/professional update (list names/dates of recent publications, awards, honors) _____

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From the Archives

The Surgeon General and Alabama

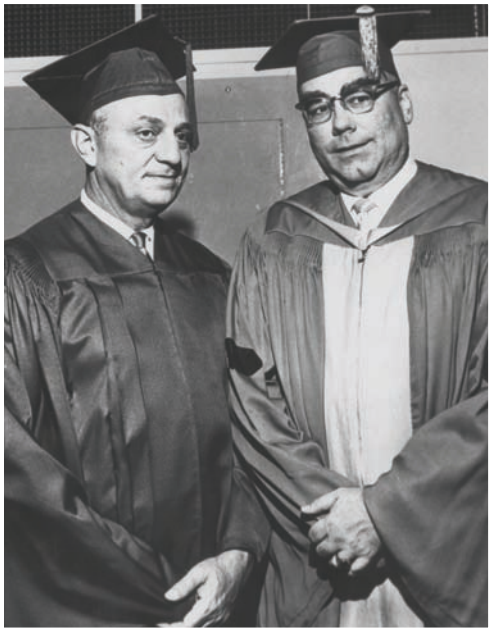
By Tim L. Pennycuff • Photos courtesy of UAB Archives

Three of the 18 individuals who have served as surgeon general of the United States Public Health Service have hailed from Alabama. (New York is the only other state that can claim three natives in that position.) Luther L. Terry, M.D. (1911-1985), of Red Level served from 1961 until 1965. David Satcher, M.D., Ph.D., born in Anniston in 1941, was surgeon general from 1998 until 2001; he also served as assistant secretary for health in the U.S. Department of Health and Human Services. Regina M. Benjamin, M.D., who became the 18th surgeon general in 2009, was born in Mobile in 1956.

The School of Medicine has hosted visits from all three Alabama natives, though its strongest connection is with Benjamin, who graduated from the school in 1984. (See page 14 for more on Benjamin.)

Left: The SOM has maintained ties with several surgeons general. In this photo, SOM dean James A. Pittman Jr. (at left) presents Surgeon General C. Everett Koop with a copy of *The Quiet Art: A Doctor's Anthology*, a book reprinted by the SOM in 1988. Koop served as surgeon general from 1982 until 1989.

Former UAB president W. Ann Reynolds presents an honorary Doctor of Science degree to Surgeon General David Satcher during the UAB commencement ceremony, June 4, 2000.



Surgeon General Luther L. Terry (left) with Matthew F. McNulty, administrator of University Hospital, date unknown.

Above: Surgeon General Terry visits the medical center for the dedication of the Luther L. Hill Heart Center, October 18, 1959. The state-of-the-art Hill Heart Center was named in honor of pioneering Alabama physician Luther L. Hill, M.D. (1862-1946), Senator Lister Hill's father and Terry's namesake.

Regina M. Benjamin speaks with School of Public Health dean Max Michael (center) and SOM dean emeritus James A. Pittman Jr. (right) prior to the UAB commencement, December 15, 2001. Benjamin received an honorary Doctor of Science degree at the ceremony.

Surgeon General Terry speaks at the dedication of the Luther L. Hill Heart Center, October 18, 1959. Seated on the stage in front of the Medical and Dental Basic Science Building and Dental Clinic are (left to right) Champ Lyons, M.D.; Guy McGowan, M.D.; Senator Lister Hill; Tinsley R. Harrison, M.D.; William R. Carter, M.D.; unidentified; and Robert S. Berson, M.D., vice president and medical school dean.

Help for Haiti

The SOM Reacts to Disaster

By Charles Buchanan

When a 7.0-magnitude earthquake devastated Haiti in January, UAB School of Medicine faculty, staff, and students leapt into action to help the victims and survivors in the days immediately following the disaster.

Concert photos courtesy of Teresa Backes

Students in the SOM's Global Health Interest Group hosted a Haiti benefit concert featuring four bands that count medical students as members. The event raised more than $1,300 for Partners in Health, a nonprofit organization that provides health care to poor communities around the world.

UAB's Critical Care Transport (CCT) jet helped fly an injured American serviceman to a Miami hospital—and in an effort to save time, it became the first United States aircraft in nearly 50 years to receive permission to fly through Cuban airspace. The UAB medical crew on board included Kevin Barlotta, M.D., CCT medical director and assistant professor of emergency medicine; nurse John Doriety Jr., R.N.; and respiratory therapist Regena Bragwell, R.R.T.

The SOM chapter of the Student National Medical Association (SNMA) collected more than $1,200 in a fund-raiser for the American Red Cross disaster relief and development fund for Haiti. Contributors were eligible to receive gift cards donated to SNMA by local and national businesses. (Learn more about SNMA on page 19.)

Photos courtesy of Mary Jane Wells.

Several SOM faculty and UAB clinical staff volunteered for mission trips to provide care on the ground in Haiti. Among them, UAB nephrologist Suzanne Bergman, M.D., and physical therapist Mary Jane Wells treated rural patients while nephrologist Zipporah Krishnasami, M.D., and cardiovascular services nurse Lawana Salley, R.N., worked in hospitals in the capital city of Port-au-Prince.

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Online Courses

Most Frequent Cardiac Arrythmias: Diagnosis and Treatment; .25 AMA credit.

Treatment Options for Moderate to Severe Plaque Psoriasis; .25 AMA credit.

Identifying and Treating Problem Drinkers; .25 AMA credit.

The UAB Study of Aging: Strategies to Preserve Mobility and Independence; .25 AMA credit.

Therapeutic Options for Inflammatory Bowel Disease; .25 AMA credit.

Tinnitus: In Search of Silence; .25 AMA credit.