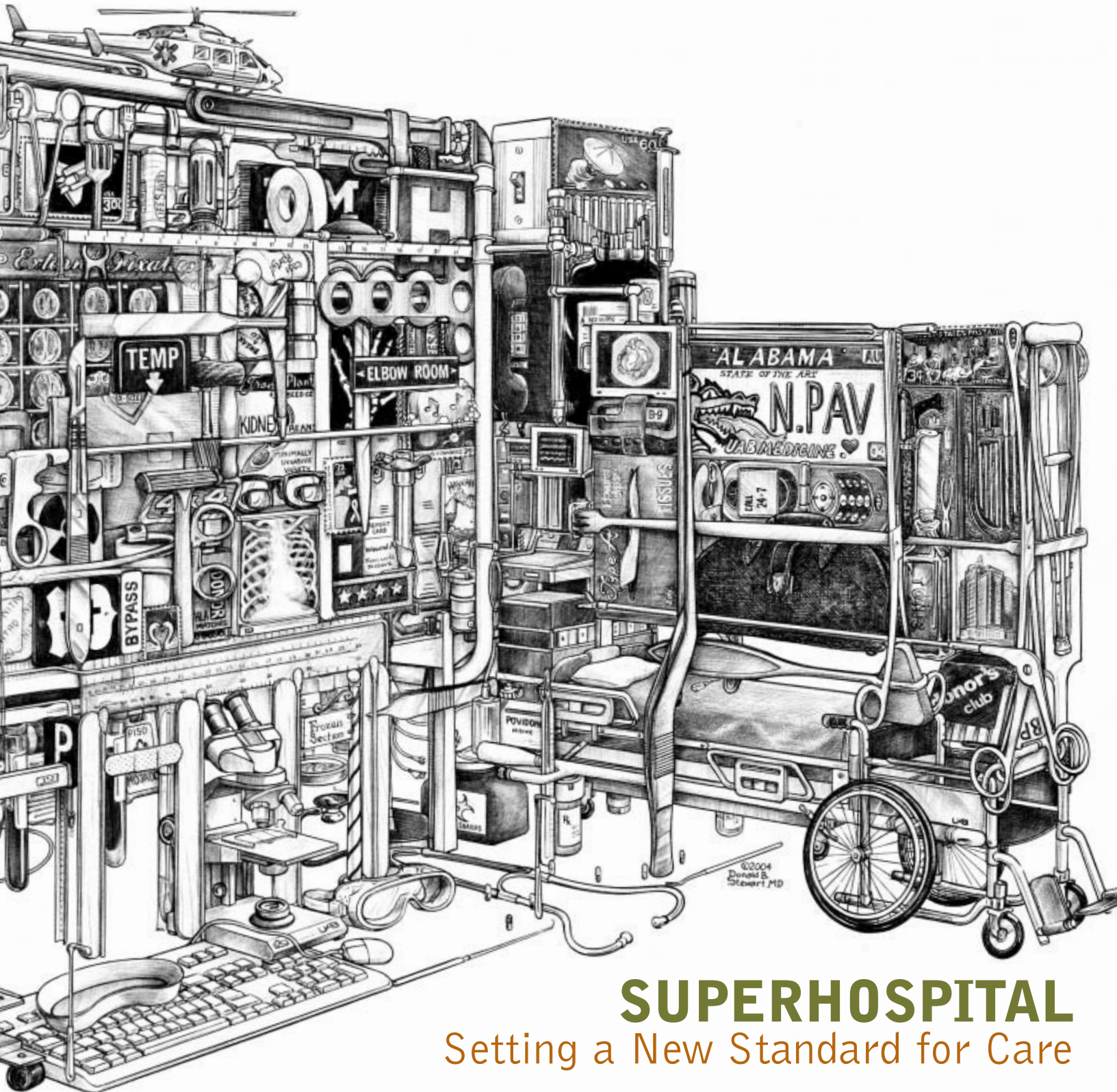


ALABAMA MEDICAL Alumni Bulletin

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SUPERHOSPITAL
Setting a New Standard for Care



Dean's Corner

Dear Colleagues:

As many of you already know, I have decided to step down from my position as dean and return to the faculty of the School of Medicine. I wish the incoming dean, Dr. Robert Rich, the best of success, and I know he will make significant contributions to our school. Before I return to the faculty, I will be taking a six-month sabbatical, during which time I will start work on a book on my 31 years in academic administration.

In the seven and a half years that I have been privileged to serve as dean, much has changed at UAB and on the UASOM campuses in Huntsville, Montgomery, Selma, and Tuscaloosa. I am particularly pleased at how we have upgraded our facilities for education, research, and clinical care.

One superb example is the new University Hospital. In this issue of the *Alabama Medical Alumni Bulletin*, we take a close look inside this remarkable facility, from the spacious emergency department on the ground floor up to the rooftop helipad. The hospital is one of the most advanced clinical-care facilities anywhere; it will serve to further the UASOM's stellar reputation among physicians and help the school draw the best and brightest medical students from Alabama, the United States, and around the world.

Volker Hall has undergone a sparkling renovation, and there are new clinical/educational buildings for the Huntsville and Tuscaloosa programs. Twenty-first century research facilities have sprung up all over the Birmingham campus: the Hugh Kaul Human Genetics Building, Biomedical Research Building II, and, early next year, the Richard C. and Annette N. Shelby Interdisciplinary Biomedical Research Building. These new facilities will position the university for the next growth burst in research activity, and I am confident that Dr. Rich will provide the drive and leadership to position the UASOM at the forefront.

The future is bright: we have a great faculty, staff, and students. I hope that our ever-expanding ranks of alumni will become more active in taking part in the life and work of this great university and will support the School of Medicine as they see fit.

My best to you.

Sincerely,



Meet the New Dean of the School of Medicine

Dear Colleagues:

I am delighted to be joining such a distinguished institution as the University of Alabama School of Medicine. Under Dr. Deal's leadership, the school has been remarkably successful in facing the many challenges of academic health centers everywhere. And I certainly look forward to the opportunity to enhance even further the school's effectiveness and reputation in all of its missions.

This will be a joint effort; its success will depend upon the determined efforts not only of the faculty, students, and staff, but also of our alumni and our many friends throughout the state.

Sincerely,

Robert R. Rich, M.D., formerly the executive associate dean for research and strategic initiatives at Emory University School of Medicine, assumed the role of UAB senior vice president and dean of the School of Medicine on October 1.

Rich received his undergraduate training at Oberlin College and his medical degree in his home state of Kansas, from the University of Kansas Medical School. He completed graduate medical training at the University of Washington, clinical and research fellowships at the NIH, and a clinical fellowship in allergy and immunology at Harvard Medical School.

Rich joined the faculty at Baylor College of Medicine in 1973, and spent 25 years at the school, rising through the ranks to become vice president and dean of research. In 1998, he joined Emory and was responsible for clinical and basic sci-

ence research programs and for implementing the school's new strategic plan for research. Within five years, the school's research funding from the NIH nearly doubled, from \$158 million to \$208 million in fiscal year 2003.

The author of more than 200 scientific writings, Rich has focused his own research on the biology and genetics of T-cell function, particularly on interactions between antigens and major histocompatibility complex molecules. He has advised the NIH and the Association of American Medical Colleges on science policy and has served on the boards of directors of numerous organizations, most recently with the Federation of American Societies for Experimental Biology.

Look to the spring/summer issue of the *Alabama Medical Alumni Bulletin* for an in-depth interview with Dean Rich on his vision for the future of the UASOM.

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CME Calendar Inside Back Cover

UASOM Cracks Top 25

Jumping three spots from its previous ranking, the UASOM placed 25th in the research category of *U.S. News & World Report's* latest list of the nation's top medical schools. The school's primary-care ranking—30th—was unchanged from the last version of the list in 1992.

Three UAB medical specialties made the top 20: AIDS (fifth), women's health (eighth), and internal medicine (19th).

The School of Nursing also rose through the charts, up two spots in a tie for 19th place. Three master's degree programs in the School of Health Related Professions were ranked: health services administration (10th), physical therapy (tied for 25th), and occupational therapy (tied for 39th). And for the first time, the School of Engineering placed a program in the rankings. The school's biomedical engineering program tied for 31st place.

Huntsville Program Building Medical Homes

Three years ago, Fredric D. Burg, M.D., then executive director of the UASOM's Huntsville Regional Medical Campus, hosted a conference with colleagues at Huntsville Hospital to discuss a coverage crisis. Thousands of children in the region were going without proper care because their parents didn't have health insurance—even though most were eligible for free or low-cost insurance plans.

Out of that meeting came a new program, R-Kids-R-Covered, and a goal: to insure an additional 2,003 children (above a statistical baseline) in Huntsville and Madison County in two years. By January 2003, that number was close to 3,000.

The same group convened this March to start a new program: Medical Home. "The concept is that every child in Huntsville/Madison County should be able to identify who their doctor is and whom they saw in the last two years for medical evaluation and preventive health care," says Burg, who left the Huntsville program in September to pursue other opportunities. Robert Centor, M.D., is now acting associate dean.

This fall, teams made up of two family-practice residents and two medical students from the Huntsville program are fanning out into six local middle schools. Working with school nurses, administrators, and parent-teacher associations, they are promoting health maintenance and educating parents and students on how to find a primary-care physician.

Burg hopes that Medical Home will eventually be expanded to other schools, and that it will be effective at combating student absenteeism. "We have support on this program from the heads of the PTAs in Huntsville and in Madison County, from the superintendents in both areas, from the mayor, the commissioners, and the district councilmen," he says. "Everyone is excited."

Minority Scholars Program Producing UASOM Doctors

Cynthia Scott has spent the last decade-and-a-half helping minority students navigate the pitfalls of undergraduate education with impressive results. Scott is the director of UAB's Minority Scholars Retention Program (MSRP), which has graduated 351 students in its 15-year history—91 percent of those who were enrolled. The program is designed to give scholarship and non-scholarship students administrative and peer support, including class recommendations, study assistance, and a network of advisors and mentors.

Scott makes sure her students (roughly 50 are in the program at a time) produce a four-year graduation plan and an updated resume, participate in volunteer work during the school year, and find summer internships.

Originally started to encourage UAB's minority graduates to return to the school as faculty, the program is also shaping a new generation of professionals, including lawyers, scientists, researchers—and doctors.

"One benefit of the MSRP is the number of doctors that we have produced, and there are a lot of them," Scott says. Indeed, 35 MSRP students have gone on to medical school, and 40 percent have chosen to attend the UASOM. "It's a natural progression for students to leave this program and go into our medical school," she says.

"The year that the School of Medicine had its largest number of African-American students in the first-year class—I believe there were 12 of them—eight of them were our students."

MSRP students have gone on to medical school at Yale and Washington University in St. Louis, among others, but many find it hard to pass up the school right around the corner. "I have students who get accepted at five or six different medical schools and still stay here," Scott says.

A Match Made in Alabama

University Hospital filled all available resident positions in this year's National Residency Matching Program, including a sizeable contingent of newly minted physicians who won't have to move too far. Thirty-eight of the 140 matched positions (28 percent) went to UASOM grads, by far the largest representation from any school.

Nine positions were filled by graduates of the Medical College of Georgia; seven by graduates of the University of Tennessee, Memphis, College of Medicine; and five each from the University of South Alabama College of Medicine, Louisiana State University School of Medicine (Shreveport), and Louisiana State University School of Medicine (New Orleans). Other new residents hail from Georgetown, Johns Hopkins, Wake Forest, and the University of Southern California.

The UASOM programs in Huntsville, Montgomery, Selma, and Tuscaloosa had similar success, with all 31 open positions matched.

Physician-Artists of 2007

First it was CDs, now it's jewelry. School of Medicine students carried on the university's tradition of innovation at the Alpha Omega Alpha (AOA) Student Art Show this spring, expanding the traditional categories yet again. Last year, a disc of original tunes joined sculptures, paintings, and photographs at the annual show, and carried off the top prize. In the 2004 version a choker made of bronze and semiprecious stones managed to grab third place.

"We felt the craftsmanship was excellent," says Stefanie Rookis, curator of the Alabama Museum of the Health Sciences, one of four judges from the Birmingham art and medical communities.

Presented by the Alabama chapter of AOA, the national honor society for medical schools, the show is now in its fourth year. First-place honors went to Justin Duke, for an untitled series of black-and-white photographs juxtaposing the human body with natural objects.

Cash awards were given to the top three entries, all of which turned out to be from first-year students. In fact, first-years swept every category but one. The lone holdout was Mary Boyd-Barfield, MS-IV, who won the contest twice in her first two years and took home Juror's Choice awards the last two, showing her range by winning with oil paintings, a chalk drawing, and a sculpture.

UAB Health System to Manage Baptist Health of Montgomery

The UAB Health System has entered into an interim agreement to provide management assistance to Baptist Health of Montgomery, including its three hospitals: Baptist Medical Center South and Baptist Medical Center East in Montgomery, and Prattville Baptist Hospital. Besides the 689 licensed beds, the agreement includes management of ambulatory-care clinics associated with those hospitals.

"UAB was approached by Baptist Health leadership for assistance in improving financial performance," said David Fine, former UAB Health

System chief executive officer. “As a \$1.7-billion net-patient-revenue integrated delivery system, UAB enjoys economic opportunities not currently available to Baptist Health. We are committed to helping Baptist Health enhance efficiencies and revenues so it remains a vital part of the Montgomery-area community.”

The Health System will diagnose Baptist Health of Montgomery’s financial and operational activities and prescribe long-term solutions. “We are developing a strategic plan for the system to reposition it as the community resource it has been and devising a variety of initiatives related to employees, physicians, and the services they provide,” Fine said.

The UASOM’s education and community-service missions will be furthered by UAB’s assistance to Baptist Health. Almost 40 percent of physicians at Montgomery Baptist Hospitals are graduates of the UASOM, and Baptist Medical Center South has long been a training site for 18 to 20 UAB residents annually.

“Sustaining that educational effort is very important to UAB,” Fine explained, “as is serving the health needs of the people of Alabama and the needs of sister organizations that are likewise engaged.”

UAB Awarded \$20 Million to Treat HIV in Zambia

Some of the poorest victims of Africa’s AIDS epidemic will now get access to the latest treatments medical science has to offer, courtesy of a series of grants received by UAB’s Department of Obstetrics and Gynecology from the Centers for Disease Control and Prevention.

The department has been awarded three 5-year grants exceeding \$24 million to provide HIV/AIDS care and treatment to individuals in Zambia, working in conjunction with the UAB-established Centre for Infectious Disease Research in Zambia. AIDS has struck Zambia harder than almost any other place on Earth—nationwide, one in five adults is infected with HIV. Zambia is also one of the world’s poorest places, with 92 percent of the population living on less than \$2 a day.

“These desperately needed resources will help us create hope where there has been virtually none and will make a dramatic difference in the lives of so many,” says Jeffrey S. A. Stringer, M.D., UAB assistant professor of obstetrics and gynecology now working in the Centre for Infectious Disease Research. “Care will include combination antiretroviral medications—AIDS cocktails—that until now have been prohibitively expensive for the vast majority of people in Zambia.”

By the end of the five-year grant period, as many as 25,000 HIV-infected patients are expected to be under the program’s care, including more than 10,000

ill enough to require antiretroviral medications.

A multidisciplinary team from UAB, including representatives from the UAB Center for AIDS Research, UAB School of Public Health, and various departments within the School of Medicine, will work with Zambian health-care professionals to administer treatment programs at three provincial hospitals and a number of neighborhood clinics.

“UAB’s Zambia operation is a large-scale research, training, and clinical-care effort,” says Sten Vermund, M.D., Ph.D., professor of epidemiology and director of the Division of Geographic Medicine. “In recent years, the program has attracted Zambian physicians and other health-care professionals to UAB to pursue master’s degrees in public health—knowledge they are now using to step up the fight against HIV/AIDS in their home country.”

Toasting a New Center

For the past 10 years, researchers at UAB have been delving into the mysteries of the grapevine, conducting pioneering studies into the health effects of wine. Their latest breakthrough: the UAB Center for Wine and Cardiovascular Health. Funded with government and private grants, the center will be directed by Francois Booyse, Ph.D., and Dale Parks, Ph.D. In 2003, the National Heart, Lung, and Blood Institute recognized the Booyse group’s pioneering labors with \$7.6 million to fund the first multidisciplinary programmatic grant in the United States to focus specifically on the mechanics of the relationship between wine and cardiovascular health.

FACULTY NEWS

Wertz Named to National Infectious-Diseases Council

Microbiology professor Gail Wertz, Ph.D., an expert on RNA viruses, has been appointed to the National Advisory Allergy and Infectious Diseases Council. The principal advisory body of the National Institute of Allergy and Infectious Diseases (NIAID), the council provides recommendations on the conduct and support of research, including the training of young scientists and the dissemination of health information derived from NIAID studies. NIAID is one of the National Institutes of Health; it supports basic and applied research to prevent, diagnose, and treat infectious and immune-mediated illnesses, including HIV/AIDS, illness from potential agents of bioterrorism, autoimmune disorders, and allergies.

Wertz’s research addresses both basic molecular mechanisms involved in viral replication as well as development of novel concepts for new vaccines. Her

area of interest includes human respiratory syncytial virus, a major cause of illness in infants and children.

A past president of the American Society for Virology, Wertz has received two NIH MERIT awards, as well as the “Freedom to Discover” Infectious Diseases Research Award from Bristol-Myers, Squibb. She also serves on the Board of Scientific Counselors for the National Center for Infectious Diseases of the Centers for Disease Control.

Alvarez to Chair Ovarian Cancer Panel

Ronald D. Alvarez, M.D., director of the UASOM’s Division of Gynecologic Oncology, has been elected to chair a Department of Defense (DOD) panel charged with selecting the best new proposals for the DOD’s 2004 Ovarian Cancer Research Program. The program, now in its sixth year, is looking to fund research proposals that focus on new prevention, diagnosis, and treatment strategies for ovarian cancer.

Alvarez heads the women’s cancer program of the UAB Comprehensive Cancer Center, and has served on the DOD program’s Integration Panel since 2001. In his new role as chair he will lead the effort to make the wisest use of the program’s \$10 million in appropriations.

A national authority on ovarian cancer, Alvarez serves on the Executive Committee of the Gynecological Cancer Foundation and he has been a scientific reviewer for the NIH Clinical Oncology Study Section, the FDA, and the National Gene Vector Laboratory.

Saag Named Director of UAB Center for AIDS Research

Michael Saag, M.D., professor of medicine and director of UAB’s 1917 AIDS Clinic, has been named director of the UAB Center for AIDS Research.

“Dr. Saag is an internationally renowned AIDS researcher and physician,” says UAB provost Eli Capilouto. “Over the past 20 years, he has played an instrumental role in establishing UAB as one of the top AIDS treatment and research programs in the country. His respected leadership will continue to advance UAB’s role in the fight against HIV/AIDS here at home and around the globe.”

Saag takes over the direction of the Center for AIDS Research from Eric Hunter, Ph.D., who elected to move to Emory University in Atlanta with his wife, Susan Allen, M.D.

“Dr. Hunter leaves our AIDS program in superb standing,” says UAB president Carol Garrison, Ph.D. “We continue to have one of the top AIDS research programs in the nation and look forward to our continued position of bringing important discoveries to light in this field.”

Davis Lays Down the Law for Pathologists

Gregory G. Davis, M.D., M.S.P.H., recently completed a term as the chair of the Pathology/Biology Section of the American Academy of Forensic Sciences Council, and now he has brought his experience to the bookstore. The associate professor of pathology, who also serves as associate Jefferson County coroner/medical examiner, wrote *Pathology and Law: A Practical Guide for the Pathologist* (Springer Verlag) for pathologists, residents, assistants, and lab technicians.

Published in February, the 225-page book employs a conversational style in discussing a wide range of legal issues and controversies, including appropriate behavior for expert witnesses in malpractice cases, saving organs for teaching, using DNA to confirm identity, and the legal challenges of new technologies.

RESEARCH AND CLINICAL NEWS

Researchers Discover HPV Replication Mechanism

Like a nasty stowaway, the human papillomavirus (HPV) hides out in dividing cells, sneaking in with the intent to stay—for good.

That was the breakthrough discovery announced recently by UAB researchers, who believe they've found the replication mechanism HPV uses to remain in the body for decades. HPV is actually a "family" of more than 100 related viruses responsible for warts on the hands, feet, and genitals, as well as cervical cancer and the potentially fatal recurrent respiratory papillomatosis.

"In effect, HPV is able to mimic our own chromosomes, behaving as a sort of 'mini-chromosome,' independently replicating and keeping pace as the cellular chromosomes replicate and the cell divides," says Tom Broker, Ph.D., professor of biochemistry and molecular genetics and co-author of an article describing the findings in the March issue of the *Proceedings of the National Academy of Sciences*.

A viral replication protein known as E2 binds the circular viral DNA to the spindle fibers that are present in a cell when it divides. The DNA of HPV also divides and replicates itself in each of the new daughter cells, where it can continue to replicate and persist indefinitely. HPV's special mechanism of reproduction has not been observed in other families of viruses.

"This is a major breakthrough in our quest to find ways to treat the myriad conditions associated with HPV," says Louise Chow, Ph.D., professor of biochemistry and molecular genetics and co-

author of the paper. "We now have new molecular targets for antiviral drug discovery."

Severing the Link Between AIDS and Polio Vaccine

A disturbing theory about the origin of HIV has been disproved thanks to the work of UAB researchers. The suggestion that HIV may have been originally transmitted by an oral polio vaccine contaminated with simian immunodeficiency virus (SIV) has slowed efforts by the World Health Organization to stamp out polio in Africa; several states in Nigeria, which has the highest number of reported polio cases in the world, have banned the vaccine.

But a paper in the April 22 issue of *Nature* disproves that theory, demonstrating that the SIV strain in question is not closely related to HIV-1, the virus responsible for AIDS. UAB scientists Beatrice H. Hahn, Ph.D.; George M. Shaw, Ph.D.; Mario L. Santiago, Ph.D.; and Brandon F. Keele, Ph.D.; who have conducted groundbreaking research on the link between SIV and HIV, worked with researchers from several other universities as part of a team led by Michael Worobey of the University of Arizona in Tucson.

Combating Aggressive Rheumatoid Arthritis

Is aggressive therapy the best way to fight an aggressive disease—or should physicians follow a traditional course, holding more intensive treatments in reserve? A multicenter clinical trial led by UAB investigators seeks to answer those questions as they relate to early aggressive rheumatoid arthritis (RA). More than 2 million Americans suffer from some form of this debilitating disease, and more than half of those have the aggressive type, says Larry Moreland, M.D., who is heading the investigator-initiated TEAR (Treatment of Early Aggressive Rheumatoid Arthritis) trial. When left untreated, 80 percent of RA patients develop joint erosion within two years of disease onset.

"TEAR will answer critical clinical questions about the standard of care for patients with rheumatoid arthritis and help us determine if aggressive treatment early in the disease process can prevent devastating and permanent joint damage," says Moreland, professor of medicine and associate dean for clinical research at the UASOM.

Moreland and fellow researchers—including co-principal investigator George Howard, Dr.P.H., chair of the Department of Biostatistics—will attempt to determine the optimal treatment sequence for RA patients. Currently, most patients begin treatment with methotrexate (MTX). Those whose disease continues to progress are "stepped up" to more intensive combination treatments, which

can include triple therapy—MTX, sulfasalazine (SSZ), and hydroxychloroquine (HCQ)—or MTX combined with a tumor necrosis factor-alpha (TNF-alpha) inhibitor.

"The introduction of new disease-modifying antirheumatic drugs and recent data supporting use of combination therapy have markedly changed rheumatoid-arthritis treatment," says Moreland. "In patients with early aggressive disease, it is unclear whether we should begin with intensive therapy—MTX plus another agent or agents—or reserve combination therapy for those who fail MTX monotherapy."

Funding for the trial comes from three industrial sponsors—Amgen, Barr Pharmaceuticals, and Pfizer/Pharmacia—who have contributed more than \$25 million, Moreland notes.

Teaching Hospitals Safer for Certain Surgeries

Patients sometimes wonder whether having complex surgery at a teaching hospital, where surgical residents and medical students participate in procedures, puts them at greater risk. But according to a recent study detailed in the *Archives of Surgery*, teaching hospitals are actually safer for certain surgeries.

The study, conducted by Justin Dimick, M.D., and colleagues at the University of Michigan Medical Center, Ann Arbor, compared outcomes at teaching and nonteaching hospitals for three complex gastrointestinal surgical procedures. In all cases, death rates were lower—sometimes significantly lower—at the teaching hospitals.

"These findings are consistent with previously reported studies from other large academic health centers demonstrating that mortality data in procedures involving surgical resection of the liver, pancreas, and esophagus are two to three times safer in academic health centers such as ours than in community or private hospitals," says Selwyn Vickers, M.D., UASOM professor of surgery and chief of the GI Surgery Section.

Study Finds Prepregnancy Antibiotics Don't Prevent Preterm Birth

In the 1990s, researchers working to prevent preterm births reported some heartening news: Treating genital-tract infections in pregnant women at high risk for premature birth seemed to reduce preterm birth rates.

Subsequent investigations did not produce the same results, however. Now a recent randomized clinical trial of antibiotics given prior to pregnancy conducted by UAB researchers has found that treated women actually had a slightly increased rate of preterm births and low-birthweight babies.

“Antibiotics reduced the number of bacteria in treated women, but also enhanced their inflammatory response, which may have contributed to preterm deliveries,” says William Andrews, M.D., Ph.D., professor of obstetrics and gynecology. “What our study shows is that the ‘shotgun approach’ to eliminating bacteria from the genital tract is not the right approach to reducing preterm birth.”

The paper “Interconceptional Antibiotics to Prevent Spontaneous Preterm Birth: A Randomized Trial,” by Andrews and colleagues, received the 2004 March of Dimes Award for Excellence in Research on Prematurity at the annual meeting of the Society for Maternal-Fetal Medicine in New Orleans.

More Nurses, Fewer Problems

Replacing registered nurses with cheaper, less-experienced staff is bad for patients’ health, according to a recent study conducted at UAB. Led by Sharina Person, Ph.D., assistant professor of preventive medicine, the study looked at Medicare records for 118,940 patients hospitalized between February 1994 and July 1995 following a heart attack. The results showed that patients treated in hospitals staffed by more R.N.s are less likely to die than patients treated in hospitals with fewer R.N.s.

“Over the last decade, many hospitals in the United States, in an attempt to increase efficiency and reduce costs, have reduced the number of R.N.s and increased the number of less-educated ‘nurse extender’ personnel,” says Person. “This raises serious concerns about quality of care and patient outcomes. This study, which shows a direct association between the number of R.N.s and patient deaths, validates these concerns.”

Going beyond similar studies, the UAB research accounted for numerous factors that could have skewed results. “We took into consideration many variables, including hospital volume, teaching status, nursing skill mix, and quality of care based on administration of appropriate therapies for heart-attack patients,” Person says. “Even after adjusting for all variables, the association between nurse staffing and patient mortality remained significant.”

Person suggests that the reason for the link is the high skill-level R.N.s possess. “Because physicians have limited time to spend with patients, they often rely on R.N.s to alert them to evidence of complications,” she says. “Also, R.N.s are critical in implementing standard orders and clinical assessments that may trigger physician evaluation and action.”

A Closer Look at Autism

Child-development experts agree that autism is one of the most common developmental disabilities.

Just how common it is, however, is unclear. That’s what a new UAB study, funded by the Centers for Disease Control and Prevention, aims to find out.

Researchers will tally the number of 8-year-old children living in 32 northern Alabama counties in 2002 who were diagnosed with some form of autism. In order to obtain the most comprehensive data set, records in both clinics and schools throughout the study area will be reviewed by trained staff. These records will then be carefully reviewed by experienced clinicians to ensure the resultant data are accurate. “The information gathered from the study will allow us to assess the prevalence of autism spectrum disorders [ASD], such as autism, Asperger’s, and pervasive developmental disorder,” says Russell Kirby, Ph.D., pro-

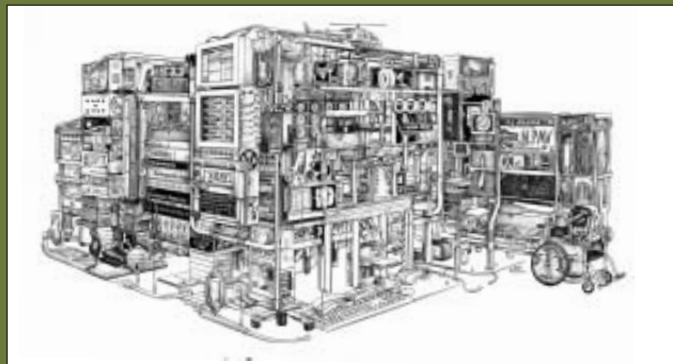
fessor of public health in the Department of Maternal and Child Health.

“Using today’s diagnostic tools, most children with autism can be diagnosed between 18 and 36 months of age,” he explains. “However, in past years autistic children may have been undiagnosed for longer, which is why we’ve chosen to survey 8-year-olds.” The results of research being conducted in Alabama and 13 other states will provide strategies for early diagnosis and treatment and hopefully lead to more effective interventions and services for children with ASD. Researchers involved in this study are working closely with the Autism Society of Alabama to solicit input from parents and providers and ensure their continued support.

CALLING MEDICAL INVESTIGATORS

The drawing of the new University Hospital on the cover of this issue of the *Alabama Medical Alumni Bulletin* is composed of more than 175 individual images. They cover all of the services that will be using the new facility—the emergency department, surgery, trauma, and more—plus some of the unique features of the hospital. Many have a hidden meaning or a tongue-in-cheek medical reference. In the next issue of the *Bulletin* we’ll take a closer look at this remarkable picture and identify all of the witty drawings inside, but in the meantime see if you can find the particularly hard-to-spot items below:

1. Adson forceps
2. CAT scan
3. Foley catheter
4. Graft
5. ACE inhibitor
6. Medical license
7. SOAP notes
8. Senn-Muller retractor
9. Acute abdomen
10. General surgery



ABOUT THE ARTIST

You don’t have to have a medical degree to appreciate the painstakingly detailed art of Don Stewart, M.D.—but sometimes it helps. Stewart, a graduate of the UASOM class of 1985, now runs his own studio, D.S. Art, in Homewood, Alabama. He specializes in what he calls “composite drawings,” all produced with a simple black ballpoint pen after an initial pencil sketch, and he often goes back to medical themes. Recent works include a caduceus filled with healthy foods, drawn for a UASOM student-produced cookbook, and a pun-filled image of a heart (called “CARDiology” and populated by an entire suit of hearts, naturally), commissioned by Robert Bourge, M.D., director of the UASOM’s Division of Cardiovascular Disease. To see more of Don’s work, visit his Web site at [www.dsart.com].

Through an agreement with the Alabama Medical Alumni Association, readers can purchase prints of Don’s drawing of the new University Hospital—called “Lifesavers”—by contacting Elaine Chambless at (205) 934-4463 or [echambless@alabamamedicalalumni.org].



Superhospital

Setting a New Standard for Care

By Matt Windsor

Imagine a world-class pianist, a master of her craft, dazzling audiences as she coaxes Rachmaninoff concertos and Beethoven sonatas from an aging upright. Now imagine what she could do with a Steinway grand.

That is the quantum leap the UAB Health System's talented physicians made this November when they moved into the new \$275-million, 885,000-square-foot University Hospital.

To comprehend the vast interior life of the hospital, it helps to start outside. That's what Marie Garner, R.N., M.S.N., administrative director of perioperative nursing, did to prepare her staff while the building was still under construction. "When we took the operating-room staff for tours," she says, "we would stand on one corner and tell them, 'Look down there—to that far corner all the way down there—that's how huge the ORs are.'" Pointing to two restaurants at either end of the block, she recalls, "I'd say, 'They go from McAlister's to Wendy's on two floors.' And their jaws just dropped."

Impressive spaces are in abundant supply in this facility, one of the largest medical construction projects in the country. There is the high-tech emergency department, as big as a football field; the spacious patient rooms, all private, with computer terminals in each for bedside charting; the turbocharged trauma elevator, capable of reaching the 12th-floor helipad from the basement in 14 seconds; and the three-story atrium at the marble-lined main entrance, with seating for hundreds of visitors.

You could take every store at Birmingham's Summit, one of the nation's largest shopping centers, and fit it into the building with plenty of room to spare. But in this age of certificate-of-need boards and other curbs on hospital overexpansion, one thing is clear: the new University Hospital is very much a product of necessity. "This is not an addition to the health center, it is a necessary replacement," says Jane Chandler, R.N., Ph.D., operations office coordinator for the University Hospital North Pavilion project.

INSIDE THE EMERGENCY DEPARTMENT

Case in point: the old Jefferson Tower emergency department. Emergency vehicles and ambulatory patients had to share the same main entrance, which was set above street level, so ambulances often had to unload patients on a slope. And chronic overcrowding meant that patients sometimes ended up in beds in the corridors. "I think UAB has always strived to deliver quality emergency services, but maybe not in the best headquarters," says Thomas E. Terndrup, M.D., chair of the Department of Emergency Medicine. "Having a new emergency department, a new location for practice, will create the opportunity to further improve the service and improve the public's perception of the service, as well."

For most patients, the emergency department (ED) is a hospital's front door. In the new University Hospital, they'll find a safer, more welcoming, more efficient entrance. Terndrup's gridiron-sized department has almost enough exam space for an actual football team; its 46 rooms mean there are no longer any beds permanently designated in the hallways. Waiting room space has also increased. "Basically, there is a lot more elbow room," he says, referring to the increased square footage available for patients, family members, and staff. But that doesn't mean there is unlimited space, Terndrup adds. "It is important to recognize that although the footprint has increased by a

factor of four, the overall examination and treatment rooms have increased by only 24 percent."

Other notable features of the new ED are separate, ground-level entrances for patients arriving by ambulance and those who are ambulatory; four triage rooms (up from one in Jefferson Tower); an increased security presence, including a police substation; and more private space set aside for the families of critically ill or injured patients.

New technology also gives the department an edge in patient care. Several plasma computer screens mounted around the ED track patients and bed availability in real time, allowing staff to make sure rooms are available for those who need them most. "We also have more imaging capacity," Terndrup explains. "We have bedside ultrasonography and two speedy, high-quality CT scanners—the kind of technology that allows us to get more and more information that's helpful for taking care of patients."

More efficient triage, more room, and greater patient tracking will allow the new ED to increase its average patient load from the approximately 50,000 it had been seeing each year. But the effect of the new University Hospital goes beyond numbers, says Terndrup. "The bottom line is that we will be able to offer even better care."

INSIDE TRAUMA

That sentiment is echoed by physicians throughout the hospital, from the emergency department up to the ninth floor, the highest clinical level, where the trauma section finds itself together at last. "Before, we had patients spread out throughout the medical center, which made it a challenge to provide care, particularly when our service volume is 75 or 80 patients at a time," says Loring W. Rue, M.D., section chief of trauma, burns, and critical care. "This hospital consolidates most of the activities our patients require in one area, so the vast majority of their procedures can be performed in the new University Hospital. Everything's contained, and that's going to be better for the patients, and certainly better for the staff."

The consolidation and containment Rue refers to is what hospital planners call "platforms of care"—a concept that was first developed in the West Pavilion project and



A spacious, light-filled atrium at the entrance to the new University Hospital leads directly to the bank of public elevators (in center of photo above), quickly orienting visitors to the massive facility.



Rooms with a view: University Hospital's ICUs (top) and general patient rooms (bottom) all offer privacy, space, and a window to the outside world.

reaches its zenith in the new hospital. University Hospital is tied to the rest of the medical center by six bridges (seven when the proposed Women and Infants' Facility opens) that link services in a medically logical manner—connecting operating rooms in University Hospital, for example, with surgical nursing units on the same floor in the Spain-Wallace building.

“We tried to organize clinical services so that there was a logic to the grouping of patients on adjacent units in terms of their disease conditions, the services that were caring for them, and what other allied support was essential,” says Arpan Limdi, director of hospital facilities planning and management. “For example, we have the operating rooms, their recovery space, and their ICUs all on the same level.” In many cases, patients will be able to stay on one floor (across several buildings, potentially) throughout the course of their treatment.

All patient-care floors in University Hospital also follow the same basic layout—nursing units in the interior, patient rooms on the perimeter, supplies kept in the same general areas—which allows nurses and doctors to rotate into unfamiliar units in emergencies and still find their way around.

INSIDE THE DESIGN

Soaring atria and endless corridors are impressive, but designers are quick to point out that University Hospital's greatest asset—space—could have been its biggest liability. All that room can become a problem if visitors get lost or nurses have a hard time keeping an eye on far-flung patients.

“Spaces create distances,” says Limdi. “You have to realize that along with the benefit of the bigger space you have the potential of reduced efficiency, because you are trying to move people and material across longer distances.”

Some of the solutions are high-tech, such as the communicators used in the emergency department (see “Closing the Book on Pages,” next page). But planners also spent a great deal of time crafting the building's low-tech “wayfinding” apparatus—the often-subtle means of directing human traffic in public places.

“Wayfinding is complex in most academic medical centers, because they're always adding new things,” says Martin Nowak, UAB Health System's chief strategy and planning officer. “But great thought has gone into that issue in this building.” One mental clue for patients and visitors is the diamond-shaped pattern found in the floor tiles of key intersections in public areas. “This is a big building, and we didn't want visitors to be confused by directional signage that hospital staff will need to use,” says Limdi. The diamond is intuitive, he explains; it acts as a visual point at which people make decisions about where they're going. “When you see a diamond, you know you're going to be making a decision about change in direction.”

Throughout the design process, the doctors, nurses, and other medical staff of the UAB Health System played a major role. “What's been rewarding and impressive is the concerted effort that was made many years ago to get the principal users involved in the planning of the building,” says Rue.

INSIDE SURGERY

Perhaps no service in the medical center felt the limitations of its old facilities more than the surgery department. Relentless technological advances have forced surgeons to find space in their operating rooms for a swelling host of new equipment—equipment for which there has been precious little room until now. “One of the most important things to understand is that this is a desperately needed enlargement of space,” says Kirby I. Bland, M.D., chair of the Department of Surgery. “The size of the new OR suites is astounding—we're going from 450 square feet to 625 square feet. And they're capable of handling all the latest advances.”

Albert D. Pacifico, M.D., division director of cardiovascular and thoracic surgery, explains: “These suites are all set up to accommodate minimally invasive surgery and laparoscopic and



Video-screen control boards let staff keep an eye on all of the operating suites on each floor at a glance.

thoracoscopic procedures,” he says. “And there's another very important detail that's not visible. In an operating room, air handling is crucial; in the new building, a very high exchange of air is built in. That helps us reduce infection.”

Surgical services in the new University Hospital are spread across two levels, the fifth and seventh, with the radiology department in between. Both floors make use of the “clean core” concept, which reserves a central corridor behind the ORs—physically separate from patient and staff corridors—to house sterile surgical instruments and supplies.

Flexibility is built in. Small anterooms were added between operating rooms to hold new technologies that may be introduced. Prep-hold and recovery rooms are separated by a single corridor, so they can be “flexed up” (using surplus recovery units for prep-hold) in the mornings, when patients are being readied for the day’s procedures, and “flexed down” (using prep-hold units for recovery) in the afternoons, when there is a flow of patients needing to recuperate before returning to their rooms.

“It’s a wonderful new facility,” says Richard B. Morawetz, M.D., director of the Division of Neurosurgery. “It simply means more and better resources for patient care.”



The emergency department is divided into six patient-care “pods,” each with its own nurses’ station.

INSIDE PATIENT CARE

World-class technology and top-notch doctors will always attract patients, of course, but the public is also increasingly likely to take into account other factors in judging a hospital: the availability of private rooms, multiple dining choices, and a less intimidating environment.

Designing facilities that are attractive to patients and their family members makes clinical and economic sense, says Nowak, the Health System planning officer: “It has become both an expectation and a satisfier for patients and families, for example, to have private rooms and appropriate accommodation made for family members to stay in the rooms.”

The new University Hospital makes a good impression from the very beginning. Its large parking deck is connected directly to the building by a second-floor bridge (an extended-stay hotel, which will also be tied into parking, will open soon). The main waiting area on the first and second floors is three times the size of the old space in Jefferson Tower, and some of its seats even have fold-out desks. Each individual unit also has a waiting area on its own floor, so visitors don’t feel that they have been completely separated from loved ones. And the outdoor “healing garden” on the fifth floor, with its plants and waterfalls, provides a quiet, secluded area for patients and family members to rest and talk. But the most valued amenity at University Hospital may be the large, private patient rooms, with convertible couches that turn into beds and let visitors spend the night in comfort.

“We’re already renowned for what we do at UAB, though we’re relatively young,” says Nowak. “Then adding new ORs, new patient rooms, state-of-the-art technology throughout—you couple all that with our general overall success, and I think it’s a great attractor.”

OR TV

It may sound like a plain old database, but the Surgical Information Management System (SIMS) is actually one of the most impressive feats of technological wizardry in the new University Hospital. The hospital’s operating suites are packed with electronics, including two cameras (one, above the door, films the goings-on in the room; the other is mounted on a light boom and records the procedure in progress), a DVD player and recorder, a six-disc CD player, and four flat-panel screens suspended above the operating table. In command of this electronic arsenal is a perioperative or circulating nurse stationed in each suite who directs the proceedings from a touch-screen control center: SIMS.

The four screens above the operating table put more information at a surgeon’s fingertips than ever before. One displays video images from the cameras. The other three can be programmed at the touch of a button to show patient vital signs, charts, digital images of tissue sections from the pathology lab, video from other operating rooms, radiologic images, and more. Nurses can get information from the online charting system and PACS (the picture archive and communication system, a computer network that holds digitized radiologic images and reports), and send requests via the hospital paging system and e-mail. In the future, voice-activated systems may be installed to let surgeons control some of the SIMS functions directly.

“The doctors are very excited about the opportunities that it will afford them,” says Marie Garner, administrative director of perioperative nursing. “And I love it. It’s such a neat technology.”



Surgeons can track vital signs, lab results, patient records—even other ORs—on four flat-panel video screens.

Closing the Book on Pages

To ensure that staff can find each other across 35,000 square feet of rooms and corridors, key personnel in University Hospital’s new emergency department have been issued “wireless communicators.” Basically high-tech cordless telephones, these devices allow physicians and nurses to stay in touch with their units, even if emergencies draw them elsewhere in the ED. An added benefit: Because of the communicators, no overhead pages, other than hospital-wide pages, will be sent in the department, keeping noise to a minimum and making life easier for both patients and staff.

Can I Have Your Room?

What’s going to happen to all the space vacated in existing buildings by University Hospital migration? The old emergency department already has a new role: it will be converted into a more convenient entryway to the OB/GYN areas in Jefferson Tower. Health System administrators have not yet determined how they will fill all the empty rooms, but research and office space will be at the top of the list.

S. Richardson Hill Jr., M.D.

CREATING THE FUTURE

By Anita Smith



S. Richardson Hill was a master recruiter, bringing high-profile figures such as John W. Kirklin (left) and Gene Bartow (above) to Birmingham.

Building a great medical school requires a great recruiter, and the University of Alabama School of Medicine has had several—physicians with the vision to see the future they wanted to create, and the will to make it happen.

For S. Richardson Hill Jr., M.D., the call to what was then the Medical College of Alabama used an approach that he would perfect in later years to bring medicine's leading lights to Birmingham.

RECRUITING THE RECRUITER

In 1954, Hill was contacted by the chairman of the Department of Medicine, Tinsley R. Harrison, M.D., who wanted to know if Hill would fill the role of guest endocrinology lecturer at the fledgling school, which didn't have an endocrinologist. After Hill visited, Harrison pitched him on moving to Birmingham. But to make that sale, Harrison had to convince the young emerging star to leave the faculty at Harvard and the Peter Bent Brigham Hospital in Boston, where he also had interned and served a residency and a fellowship.

Harrison succeeded. Hill came to Birmingham and rose in the ranks to become the medical school's dean, then vice president for health affairs, and ultimately UAB's second president. There's no doubt that strong recruitment skills stand out in the legacy of

Hill, a distinguished professor emeritus who died at age 80 on July 4, 2003. "When Dick was recruiting, he didn't just seek who might be available. His goal was to recruit the very best, to go for excellence," says Charles A. McCallum, D.M.D., M.D., who was UAB's third president, serving from 1987 to 1993.

An approach Hill and his colleagues often used was to invite a top-flight professional to consult in developing a plan to move UAB forward, and then recruit that person to implement his or her own plan.

"Not many people will turn you down if you call them and tell them you need help and advice," Hill said in a videotaped interview in 1996 with Paul S. Howard, M.D., a private-practice Birmingham plastic surgeon and UASOM graduate. That interview was part of a "Recollections" series sponsored by the University of Alabama Medical Alumni Association.

CHASING STARS

While Hill was dean of the Medical College of Alabama, his star recruit was undoubtedly John W. Kirklin, M.D., who in 1966 became the chairman of the school's Department of Surgery. The news flashed around the medical world when the internationally

known Kirklin resigned the Mayo Clinic's top surgery post to accept the Birmingham position.

In his interview with Howard, Hill said that when his school's search committee was at work prior to recruiting Kirklin, he instructed the committee's chairman "to give me the names of the best people anywhere to be chairman of a major department of surgery."

Hill used a familiar tactic to lure Kirklin, initially inviting him to Birmingham as a consultant to develop a plan for the medical school to build a world-class surgery department. Then Kirklin was recruited to implement his plan.

"In developing UAB's medical center, I think practically everybody would single out Dick Hill's role in recruiting John Kirklin as Dick's biggest single contribution," says James A. Pittman Jr., M.D., retired UASOM dean. "That was huge."

As the years went by, Hill's recruitment successes continued. As president of UAB in 1977, Hill and colleagues made headlines when they recruited high-profile coach Gene Bartow from UCLA to become UAB's athletic director and head of its basketball program. Hill badly wanted a strong athletic program to help bond the medical and non-medical units of UAB's growing urban campus.

In his interview with Howard, Hill recalled the excitement of University of Alabama System Trustee Ehney Camp when he learned that UAB was trying to

recruit Bartow: "Ehney said to me, 'Why, Bartow is the best in the country!' And I told him, 'Yes, I know!'"

When it came to recruiting—in medicine and elsewhere at UAB, Hill proved that he, too, was one of the best.



Hill came to the School of Medicine at the urging of Tinsley R. Harrison.

Courtesy of UAB Archives

Courtesy of UAB Archives

Courtesy of UAB Archives

MEDICAL SCHOOL APPLICATIONS INCREASE

By Sandra Bearden

Following a national trend, applications to the University of Alabama School of Medicine for the 2004-2005 school year are up from last year, according to Nathan Smith, M.D., assistant dean for admissions.

The 1,545 applications for this year's first-year class represent a 13 percent increase over the 1,365 applications received for 2003-04, an increase that Smith says is mostly attributable to out-of-state applicants. "The number of Alabama applicants actually went down a little—from 418 last year to 404 this year," he says. "This reflects a pattern that as applications go up nationally, our overall number of applications also increases."

The Association of American Medical Colleges reported a 3.4 percent upswing in applications during 2003-2004 after a six-year decline. No reasons have been documented, but there may be a link with the economy.

"I have no evidence of this other than folklore," Smith says, "but if you track the stock market, as the Dow Jones and NASDAQ fall, interest in medicine as a career increases. Usually there's a little bit of a lag. Whether these two things have anything to do with

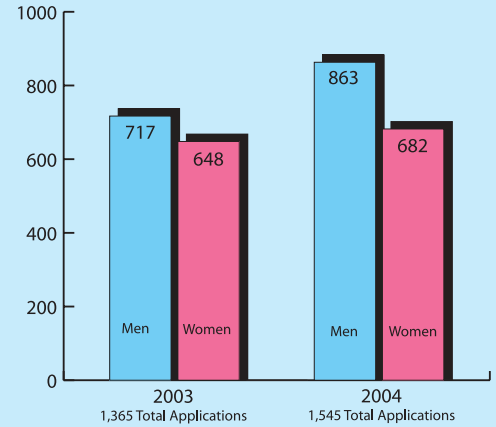
each other, nobody really knows. But the increase may relate to the fact that if opportunities in business seem less appealing, many talented young people choose medicine."

WOMEN TAKE THE LEAD

Nationally, women made up the majority of applicants for the first time ever last year. At the UASOM, a little more than 47 percent of 2003-2004 applicants were women. A growing Hispanic population in Alabama and around the country led applications to the UASOM from Hispanics to double from 22 to 44.

Smith says the figures for African-American applicants are irregular, increasing in some years, but falling back in others. "However, the total number of African Americans applying to medical school is substantially under-represented in terms of total population," he comments. "That doesn't mean just the state of Alabama. Nationally, only about 2,700 African Americans applied last year to more than 120 medical schools."

The UASOM's recent uptick in applications isn't a



record: applications peaked in 1994 at 2,494; in 1995, the school received its highest number of applications (578) from Alabamians. Basically, Smith says, the latest bump means that more applicants will be competing for the same number of slots. "The number of students we can accept has been stable at 160 for several years," he explains. "As the number of applications rises, competition increases."

Out of Many, One Tuscaloosa Program Comes Together in New Building

By Matt Windsor

No one likes a long commute—especially after they've already gotten to work. But for years that was the lot of faculty, residents, and students at the UASOM's Tuscaloosa program, where clinical and educational facilities were spread across campus in four widely separated buildings.

"That dispersion was inefficient," says William Curry, M.D., FACP, outgoing dean of the program. "We had people who had worked here for 20 years who didn't even know each other."

AN OPEN CLINIC

Everything changed with the opening of the new University of Alabama School of Medicine-Tuscaloosa Campus building early this summer. The two-story, 77,000-square-foot facility brings together the vast majority of the clinical, educational, and administrative components of the program under one roof—all but the Rural Medical Scholars Program, which will remain on campus—and will save \$800,000 per year, according to Curry.

The upper level, some 55,000 square feet, is dedicated to the University Medical Center clinics; below are teaching rooms, the medical library, and administrative offices. The upper level also has dedicated space for Tuscaloosa's growing research program, under the

direction of John C. Higginbotham, Ph.D., associate dean for research.

The building's architectural flourishes—soaring inverted-barrel ceilings with clerestory windows, and glass walls at both ends that look onto green fields and



High ceilings and glass walls make clinic areas at University Medical Center more inviting for patients.

back toward campus—serve a purpose, notes Curry. "In most clinics you feel almost trapped, hemmed in," he says. "Here, patients can always see outside."

Two long "waiting malls" flank an interior core of labs, teaching space, and maintenance space. Two family-practice units take up one of these malls, with specialty clinics (for pediatrics, OB/GYN, internal

medicine, and psychiatry) on the opposite side. "We were seeing 48,000 outpatients per year, and we plan on seeing more now" with the new space, Curry says. Behind the clinics are the offices of faculty and department chairs, all opening off a single corridor running the length of the building. That openness encourages sharing of resources and ideas between departments, and builds camaraderie, Curry notes.

Wireless Internet access is available throughout the building to facilitate the program's paperless charting system, which has reduced paperwork to the point that part of the cavernous medical records office may be converted into a conference room.

THE PERSONAL TOUCH

Yet despite their "wow" factor, circuits and ceilings aren't the end, just a means to improve teaching and patient care, says Curry. Staff in the pediatrics clinic made their space more appealing to kids by adding colorful themed murals (including sailboats, rocket ships, and whales) to the exam rooms. Down the hall in the psychology clinic, private donations let designers add wall treatments and furniture that give the area a comforting, home-like feel that helps diffuse patient tensions.

The dynamic new facility will certainly help in recruiting, says Curry, especially in attracting the exceptional students the program is after: "The market in family medicine right now is down, the pay is not as good as it should be, and the work hours are still hard. So it takes a really special person who's going to be interested in doing that. But you'll find them up and down every hallway here."

Doctors on a Mission Helping Hands Reach From Birmingham to Ecuador

By Steve Dupont

It's a truly heart-wrenching scenario: a six-year-old child whose face has been burned beyond recognition, his mouth sealed shut except for a tiny hole just wide enough for a drinking straw—a boy who is disfigured, speech-impaired, and malnourished. And when you consider that he is from the largely indigent community of Ambato, Ecuador, his future appears bleak indeed.

But Henry Vasconez, M.D., chief of plastic surgery at the University of Kentucky, was not willing to accept the suffering of such unfortunate children and their families. Neither was he willing to accept the technological divide between the United States, where he received his medical training, and Ecuador, where he was born and raised. So, in 1990, Vasconez founded the Medical Mission to Ecuador, and for two weeks every February since he has led a multidisciplinary team to Ambato, his hometown just south of the country's capital, Quito.

REACHING OUT

Participants include physicians from Lexington, Kentucky, and from Birmingham, where Henry Vasconez has gained the unequivocal support of his brother, Luis Vasconez, M.D., a plastic surgeon at UAB since 1985. Luis, now the division director of plastic surgery, is quick to admit that he plays only a minor part in the medical mission. Having joined the team on four recent trips to Ambato, though, he points to a dedicated group of individuals who form the backbone of the program. Among them are Alfonso Yonfa, M.D., a pediatric anesthesiologist at Children's Hospital and a fellow native of Ambato, as well as another member of the UAB family, Gwen Boyd, M.D., professor of anesthesiology. "Her tireless effort throughout the year is responsible for the recruitment of personnel, which is essential to the mission," Luis Vasconez says of Boyd.

The team's mission is twofold: caring for as many children as possible, while providing the local Ecuadorean doctors with the education and equipment they need to continue the work themselves.

HELP FOR THE HURTING

During the first week, the team typically logs 12- to 15-hour days, operating on 150 to 200 children. Sadly, even this is not enough to meet the overwhelming demand. Due to the widespread use of antiquated gas stoves for cooking and heat, explosive accidents involving children are disturbingly commonplace in Ecuador. Burn victims represent a major segment of the patient population seen by the visiting medical team, but Ecuadoreans also show a high prevalence of congenital deformities such as cleft lip and palate, which can be a detriment not only to the patient's appearance but to his or her ability to communicate.

Week two of the mission is designated for continued patient care and follow-up to ensure smooth recoveries. It is a critical time, when post-surgical complications can be addressed quickly before they cause serious health problems, but it is also a time when the mission team can enjoy the natural beauty and rich cultural heritage of Ecuador.

Luis Vasconez credits Rotary Club International for providing financial and logistical support, both here and in Ecuador. He says Birmingham chapter president Russell Noell, in particular, has been instrumental to the success of the program.

As for that success, it's impossible to measure the impact felt by the people of Ecuador, like the six-year-old boy with facial burns. After the surgery to open his mouth, Vasconez recalls the boy's parents crying tears of joy as he would soon regain the ability to eat solid food and speak to them clearly for the first time in months. "There's no payment for that kind of satisfaction," Vasconez says. "That's why we do it."



The two weeks of the annual Medical Mission to Ecuador pass in a blur as surgeons and nurses rapidly evaluate their young patients, perform up to 200 surgical operations, and provide follow-up care, all while training local Ecuadorean medical personnel. Clockwise from top left: Cathy Mims, R.N., UAB's Kathleen Fix, M.D. (Surgery), and Aimee Walsh, M.D. (resident, Anesthesiology), and John Heinbockel, M.D., assess post-operative patients in the recovery room; Cathy Mims; Betty Akers, R.N., and Kathleen Fix; UAB surgery resident Laurence Rosenberg, M.D., and UAB surgeon Jobe Fix, M.D., meet with a patient and his mother; schoolchildren grab a snack while waiting for their checkups; residents of Ambato and surrounding villages gather at the Mission's clinic for evaluation; local hospital workers wash and roll bandages daily.

Seeking Answers in the Genes

ADVANCING THE STUDY OF GENETIC TESTING

By Charles A. Goldthwaite Jr.

From the clinical researcher's perspective, genetic testing for disease susceptibility yields insights into treatment, preventive medicine, and family planning. However, from the sociologist's perspective, the words "genetic testing" conjure up a complex set of ethical and sociological issues. Investigators in the UASOM's Department of Genetics have long recognized both perspectives, and their research is illuminating diverse aspects of this often-controversial topic.

REMOVING BARRIERS

"When I notice a trend, I begin to ask questions," says Nathaniel Robin, M.D., associate professor and director of the genetics residency training programs. Robin's research examines the attitudes of select populations regarding their interest in, and willingness to accept, genetic testing when recommended. "Once we can determine a target population's specific concerns about genetic testing, we can design appropriate education and counseling," he notes. "Often, we can identify common misconceptions and take steps to alleviate these concerns and bring benefit to patients."

Robin currently studies the attitudes of African Americans toward genetic testing for deafness. He reviewed previous reports on this population, which suggested a generalized distrust of genetic testing and research. However, he found that these were not actual studies, but primarily the opinions of individual scholars. "There are currently few studies being conducted in this area, and we can use deafness as a model to investigate attitudes in specific populations with respect to genetic testing," he notes. Robin has found that many barriers, from misconceptions about genetic testing to the logistical difficulties of scheduling the necessary blood and hearing tests, influence whether people

undergo genetic testing for deafness. His research has shown that a combination of pre- and post-test counseling successfully educates patients to the value of the tests. "If you want to maximize the benefits of genetic testing," he observes, "a program that partners with a clinical genetics center is essential."

UAB's Medical Genomics Program provides such a platform to combine comprehensive counseling with world-class genetic testing. Ludwine Messiaen, Ph.D., program director and professor of genetics, notes that UAB offers a wide array of genetic tests, many for mutations in complex genes. For example, Messiaen and her colleagues have developed a series of techniques to detect mutations in the neurofibromatosis 1 (NF1) gene, notorious for its phenotypic variability.

"The NF1 gene is highly complex, and almost every family can present with a unique mutation," she notes. "We have to be able to distinguish between the disease variants and the non-pathogenic mutations." Although such a task can be daunting, Messiaen's tests have a detection efficiency of greater than 95 percent, as classified according to criteria developed by the National Institutes of Health. "We are always updating our database of NF1 mutations, and UAB currently has the highest detection rate for NF1 testing in the world," she notes.

FACING THE ISSUES

The Medical Genomics Program also addresses the social and practical issues associated with such testing capability. "Turnaround time is a challenge for the analysis of complex genes such as NF1, and we offer both a comprehensive test and a much quicker test that focuses on specific alterations," Messiaen says. Because genetic testing often impacts many family decisions, UAB offers prenatal diagnosis in conjunc-



Nathaniel Robin and Ludwine Messiaen are educating patients about the benefits of genetic screening and developing improved tests.

tion with genetic counseling for parents-to-be. "We are now in the process of assembling a multidisciplinary team to offer pre-implantation genetic diagnosis for NF1, which is in great demand because the information can assist potential parents who have a history of neurofibromatosis with family planning."

UAB is expanding its multidisciplinary genetic testing research in many directions in 2004. Efforts are currently under way to offer tests for three major genes involved in hereditary nonpolyposis colorectal cancer, which accounts for 5 to 10 percent of all colorectal cancers. The medical genomics laboratory is also working to validate assays for the 35 most common mutations in cystic fibrosis, which will allow carrier testing for prospective parents. UAB researchers are also developing genetic tests for mutations in connexins 26 and 30, two genes involved in deafness, as well as designing a direct test for common mutations in autosomal recessive polycystic kidney disease.

"UAB is committed to understanding the full spectrum of mutations that lead to disease, thereby providing genetic testing in an artful and comprehensive manner," Messiaen says.

Clarifying Collaborative-Practice Rules

WHAT DO THEY MEAN?

By Russ Willcutt

Change is often a matter of perception. That observation comes to mind when considering the consternation that followed a recent restatement of Alabama's official guidelines for collaborative practices involving physicians and certified registered nurse practitioners or certified nurse midwives. But the truth, experts say, is that these are really nothing more than clarifications of the existing rules.

"In September 2003, the Alabama Board of Nursing revised the rules pertaining to collaborative practice between nurse practitioners or nurse midwives and physicians," says Linda Miers, D.S.N., an associate professor in the UAB School of Nursing who also coordinates the Acute and Continuing Care Nurse Practitioner Program. "The revisions had to do with how closely physicians supervise nurse practitioners and reiterated the importance of maintaining a quality-assurance program, but all of that has been in place since 1996. The existing rules have just been articulated more clearly, and that probably seems like new information to some people."

In addition, the Joint Commission on Accreditation of Healthcare Organizations has refined its requirements. "That's partially because there are more nurse practitioners in acute-care settings these days, while they were found mainly in the primary-care environment in the past," says Miers. "So the Joint Commission is concentrating on what they require regarding credentialing and privileging of these practitioners, which may also have been interpreted as new guidelines. Again, all of these are simply clarifications of existing policy."

There is one new development, however. "The Alabama Board of Medical Examiners has hired a collaborative-practice inspector, whose name is Cheryl S. Thomas," says Nicki Koski, R.N., B.S.N., policy coordinator and auditor for The Kirklin Clinic. "She's an R.N. and a program advocate who will educate physicians and help them be accountable in their relationships with nurse practitioners. Ms. Thomas will be making site visits in the coming months, so physicians need to be prepared for that."

Whatever the requirements, the collaborative-practice movement is filling a crucial void in the state, says Rachel Z. Booth, Ph.D., dean of UAB's School of Nursing. "There are so many underserved areas throughout Alabama," she says, "and part of the solution is to empower nurses to provide health care to those populations."

Targeting Killers

Understanding the Link Between Diabetes and Heart Disease

By Michael L. Miller, Ph.D.



Timothy Garvey is investigating the causes of insulin resistance at a molecular level.

Timothy Garvey, M.D., understands just how important his research on diabetes, obesity, and heart disease is to the citizens of Alabama. “Alabama ranks number one in the prevalence of type II diabetes among all states, according to the most recent CDC survey,” he says. “We also rank number seven in obesity, so this is a big problem in our state. The treat-

ment of type II diabetes and its complications accounts for one of every seven health-care dollars, and one of every four Medicaid dollars. This is a huge burden in terms of patient suffering and the financial cost of health care in our country and in Alabama.”

WAR ON DIABETES

Garvey moved from Charleston, South Carolina, to Birmingham last summer to become chair of the Department of Nutrition Sciences, as well as a GRECC (Geriatric Research, Education, and Clinical Center) investigator at the Veterans Affairs Medical Center. He is now a part of UAB’s recently announced \$13-million research and clinical initiative targeted at diabetes. His research focuses on Insulin Resistance Syndrome (IRS), which is a complex set of symptoms and risk factors that often leads to type II diabetes and cardiovascular disease. Garvey believes that this syndrome also determines which patients with type I diabetes (formerly called juvenile-onset diabetes) develop cardiovascular disease.

“This cluster of traits related to insulin resistance places individuals at much greater risk of developing type II diabetes and/or atherosclerosis—heart attacks, strokes, and peripheral vascular disease,” says Garvey. “If individuals are identified as having IRS, we need aggressive measures to prevent these outcomes.”

Risk factors that may indicate IRS include large waist circumference, high blood pressure, low HDL cholesterol, high triglyceride levels, and high levels of glucose in the bloodstream. Patients with three or more of these factors may develop increased resistance to the actions of insulin in the body, glucose intolerance, and a tendency for clotting and arterial plaque deposition—which can add up to diabetes, atherosclerosis, or both.

Unfortunately, these risk factors may not be sufficient to identify everyone with IRS, says Garvey. “We just published an article in *Diabetes Care* that points out that these criteria really have low sensitivity for

identifying patients with insulin resistance and risk factors such as cardiovascular disease.” An accurate clinical diagnosis should include a family history, a physical exam, and screenings for lipid levels, blood sugar, and glucose intolerance.

In addition to his clinical work, Garvey is also interested in the research aspects of IRS. His ultimate goal is to bring research directly into the clinical setting. “We want to know what causes insulin resistance on the molecular level,” he says. “In our research, we metabolically characterize individuals very carefully. We do skeletal muscle biopsies, analyze them in the laboratory, look at molecular parameters, and try to determine the molecular basis of insulin resistance. We try to bring state-of-the-art molecular research directly to the study of human patients.”

EARLY DIAGNOSIS A KEY

Because 40 percent of diabetic patients are undiagnosed, Garvey encourages people at risk for IRS to know the symptoms of diabetes. Excessive thirst and urination, urination at night (nocturia), blurred vision, weight loss, and fatigue can all be indicators. Interestingly, an early diagnosis of IRS can actually prevent a patient from developing type II diabetes if the right course of action is taken. A recent study in the *New England Journal of Medicine* indicates that a combination of diet and exercise can reduce the incidence of type II diabetes in at-risk patients by 58 percent. “These are dramatic results,” says Garvey, “and lifestyle modifications make a big difference.”

To patients with IRS or diabetes, Garvey offers the following advice: “Engage in a healthy lifestyle. We’re talking about moderate exercise—30 minutes a day, three to four days per week. We’re not talking about running marathons, but you have to keep it up. Also, eat a healthy diet with fruits and vegetables, and try to lose 5 to 10 percent of your body weight. That’s the best advice I can give.”

Power to the People

DEFIBRILLATOR TRIAL A SUCCESS

By Matt Windsor

It’s powerful, portable, and increasingly required by law. The question is, will anybody use it?

For years, the automated external defibrillator (AED) has been touted as one of the most important innovations in public safety since CPR. The device is designed to be operated by non-professionals with no more than a few hours of training; it monitors the heart rhythms of cardiac-arrest victims and can deliver a life-saving shock if necessary. In 2000, the Clinton administration passed the Cardiac Arrest Survival Act, requiring that AEDs be available in all federal buildings and most passenger planes.

AEDs everywhere: UAB’s campus police are the first force in the state to install units in patrol cars.



Civil War, Rude Peace

A Medical History of the War Between the States

By Matt Windsor

An army of drug addicts walks the streets. Medical programs are starved for cash. Conglomerates grow fat on government contracts. What will President Grant do?

The familiar echoes of modern ills were heard throughout a recent Reynolds Historical Society lecture on the medical history of the Civil War and its aftermath, presented by Maurice Albin, M.D., professor in the Department of Anesthesiology; Arnold G. Diethelm, M.D., professor emeritus in the Department of Surgery; and Michael Flannery, M.A., MLS, associate director of UAB Historical Collections.

The Civil War “was history in a pool of ignorance from the point of view of medical knowledge,” says Albin. Indeed, proficient surgeons would dispense with arms and legs in little more than half a minute, and one U.S. Army surgeon general was dismissed in part for banning a popular but corrosive laxative that physicians were prescribing with abandon.

Yet the war was also a major test of the recently discovered anesthetics ether and chloroform, which offered the prospect of pain-free surgery. Albin estimates that more than 120,000 anesthetics may have been administered to troops on both sides. Opium products were also widely prescribed to treat the diseases that ran rampant through army camps, especially dysentery and fevers. But the addictive properties of opioids were not understood. Wounded soldiers, often left with a hypodermic needle and syringe to administer their own morphine injections, were quickly dependent on the new “miracle drug.” Addiction to opioids was so widespread among veterans, Albin says, it became known as the “Army disease.”

The result of one of society’s first encounters with widespread drug abuse, sadly, was denial and confusion. “No pension was given to anyone considered having a case of opioid addiction,” Albin notes. “And there were no narcotic laws until early in the 20th century.”

CASUALTIES OF WAR

The Civil War also savaged Southern health care for decades. “How can you talk about education when you don’t have a postal service, banks, or courts?” says Diethelm. Even as the economy recovered, medical education lagged. “North Carolina, Florida, Mississippi, and Alabama did not have four-year medical schools until halfway through the 20th century,” Diethelm notes. “The curriculums often didn’t require a bachelor’s degree. And post-graduate training—residency—was next to nothing.”

Preliminary studies showed that the devices were safe and effective, but large-scale, systematic proof was lacking—until recently, when the results of the Public Access Defibrillation (PAD) trial were made available. The two-year nationwide study, funded by the National Heart, Lung, and Blood Institute (NHLBI); the American Heart Association; and five AED manufacturers, put 1,500 AEDs in schools, shopping centers, office buildings, and other public areas.

The result was a success for AED proponents. “The bottom line is that there was a twofold increase in survival to hospital discharge after a cardiac arrest,” says Thomas E. Terndrup, M.D., principal investigator of the trial’s UAB arm and professor and chair of the Department of Emergency Medicine. “Our trial goes a long way toward saying that after four hours of training, a member of the public can use an AED successfully and safely.”

Most of the 38 Birmingham-area locations that participated in the study agreed to maintain an AED program once it ended, says research coordinator Shannon Stephens, who implemented the UAB arm of the study with Terndrup. AED manufacturers donated units to these locations and to the uni-



Maurice Albin, Michael Flannery, and Arnold Diethelm pose with 19th-century surgical instruments at the Alabama Museum of the Health Sciences in the Lister Hill Library.

The reason: money. “It’s difficult to separate economic problems from medical education,” he says. “Faculties were small and not well compensated—in fact, most of them gave their time for free. And patient numbers were huge. Many of the faculty in the Northern schools ended up being from the South, especially the Deep South.”

In the North, drug companies organized to support the Army grew on a massive scale, says Flannery, whose latest book, *Civil War Pharmacy*, was recently released by Haworth Press. One huge lab “employed 350 women in its sewing and filling departments alone, and produced \$2.1 million in medicine—in 1865 dollars,” he says. Among the purveyors who obtained government contracts were an infant Pfizer Corporation and E.R. Squibb & Sons, forerunner to Bristol-Myers, Squibb Company. After the war, says Flannery, these companies made the United States a pharmaceutical powerhouse capable of competing with the previously dominant European manufacturers.

The Alabama Museum of the Health Sciences, located in the Lister Hill Library on the UAB campus, is open to the public and has a wealth of materials relating to the Civil War [www.uab.edu/reynolds/civilwarbib/cwbib.html].

versity; UAB outfitted six new University Police patrol cars with its share of the machines, and officers were trained to operate them. “To our knowledge, ours is the first law-enforcement agency to deploy an AED program in the state,” says Stephens.

Terndrup is continuing to study AED implementation in Alabama through a project funded by the Health Resources and Services Administration. “The idea is to take these devices especially to rural areas where accessibility might be very limited, and try to improve the public’s understanding of what they should do when they encounter a [cardiac arrest] situation,” he says. “They’ll send that information via the computer in the AED back to us here at UAB, where we’ll be able to evaluate the efficacy of the program.”

UAB’s ongoing commitment to pre-hospital care got another boost recently with the news that the NHLBI has named the university one of 10 Regional Coordinating Centers for Resuscitation in the United States. That designation is accompanied by \$3.5 million over five years, which will fund research into techniques and devices to improve the outcomes of severe injuries.



Physicians' Forum

By Anita Smith

TRANSPLANTATION AND THE ORGAN CRISIS

On any given day, tens of thousands of people in the United States are on waiting lists for some type of organ transplant. While that far exceeds the number of organs available, the United Network for Organ Sharing (UNOS) recently reported some slight progress in bridging this supply-demand gap. Comparing 2003 to 2002, UNOS data showed a 4.3 percent increase in organs from deceased donors, a 10.5 percent decrease in deaths among individuals awaiting transplant, and an increase of 550 organ transplants. There is still a long way to go, however. When these statistics were released on March 24, 2004, more than 84,000 people were still languishing on the nation's organ-transplant waiting lists.

This forum features discussion of critical issues in transplantation by two physicians with a great deal of experience in the field. Arnold G. Diethelm, M.D., is a UAB professor emeritus who served as director of transplantation at the UASOM for two-and-a-half decades after founding the program and performing the state's first kidney transplant in 1968. Diethelm also served as chairman of the Department of Surgery from 1982 until 2000. Christopher W. Old, M.D., a 1974 UASOM graduate, is a Birmingham-based nephrologist with Nephrology Associates. He has provided health care for kidney patients in the Birmingham area for 23 years, and he and his partners have referred patients to UAB for kidney transplants. One of the nation's leading organ transplant centers, UAB performs heart, lung, heart-lung, liver, kidney, and pancreas transplants.



Arnold G. Diethelm



Christopher W. Old

Could you describe the problem of finding donor organs—both living donors and cadaveric donors?

Arnold G. Diethelm (AD): The major obstacle to transplantation is the organ shortage. The results of organ transplantation today are excellent, with the new drugs of the last 15 years. The problem is that the results have been so good, the expectations so high, that the waiting list for organs has increased enormously. The organ shortage is simply the result of more people waiting for donors than people willing to donate organs—cadaveric or living-related. The real obstacle is the failure of people in this country to agree to organ donation or for their families to agree to organ donation. In part this is a matter of education, and in part it's a societal problem.

The answers to this problem are not readily visible. Many attempts have been made to improve education, as we have in Alabama; but overall it hasn't been highly successful.

Christopher W. Old (CO): I don't think the public as a whole understands the seriousness of this situation—the need for organs, the quality lives that many transplant recipients enjoy, and the extraordinary costs of treating chronically ill patients who need organ transplants. We must raise public awareness and find additional ways to incentivize the public to donate organs.

How do you feel about the issue of paying to procure organs?

AD: I think that's a matter of opinion, and people have many differing views. I don't have a strong opinion either way. But paying for organs is not the answer to the organ shortage. If it were, the areas that are paying people would not have an organ shortage. And they have a shortage like everybody else.

“The problem is that the results have been so good, the expectations so high, that the waiting list for organs has increased enormously. The organ shortage is simply the result of more people waiting for donors than people willing to donate organs.”

—Arnold Diethelm

CO: When I think of paying for organs, I don't think of direct cash payment so much as the creation of a nationwide federal program to give people a rebate on their income taxes as an incentive for organ donation. For living donors, rebates would reward the donors themselves. For cadaveric donations, rebates would reward families who authorize organ donation for deceased loved ones. If you view the payment issue from one perspective, we already are paying for the organ shortage through our tax dollars that fund treatment for chronically ill people who could benefit from transplants.

For example, as a nephrologist I see kidney-failure patients undergoing tremendously expensive dialysis treatments. I believe more people would favor organ donation if they realized the difference between a chronically sick patient and one who has undergone a successful transplant. It is night and day.

What can practicing physicians do in non-crisis situations to heighten public awareness about organ donation?

CO: I believe that all physicians have an obligation and a responsibility to discuss organ donation with their patients. A good time to discuss organ donation is during routine visits to physicians' offices—when patients aren't in a health emergency. The ideal timing does not exist when a patient lies at death's door in a hospital. Although we do approach some families in these sensitive situations, many really don't want to talk about organ donation at that time. In contrast, I think more people would step up and make a decision to donate their organs, and explain their wishes to their families, if organ donation were discussed with them by their local med-

ical doctor outside the environment of emotion-packed emergency situations. I feel that physicians' offices should be provided with organ-donation brochures, supplied by the Alabama Organ Center, to explain and encourage organ donation.

When a tragic patient-care situation does exist that could lend itself to organ donation—such as with a brain-dead patient following a traumatic event such as an accident, assault, or suicide—what can practicing physicians do to help facilitate organ donation?

AD: When a practicing physician is involved in such a situation—one that he or she feels could lend itself to organ donation—the physician can make contact with the coordinator or another appropriate staff member at the Alabama Organ Center. In recent years, organ-procurement coordinators have played increasingly important roles in serving as the “asking persons” in these situations. These coordinators can help evaluate whether a patient is a suitable donor. They also can make contact with a potential donor family and ask the family to consider donation of organs.

CO: I also see some instances in which attending physicians feel comfortable enough with families who are facing tragic situations that the physicians themselves will approach the families about organ donation. I know I have done this. Also, nurses are on the front lines of intensive care and emergency care and can play crucial roles in making these requests for organ donation.

“I believe that all physicians have an obligation and a responsibility to discuss organ donation with their patients. A good time to discuss organ donation is during routine visits to physicians' offices—when patients aren't in a health emergency.”

—Christopher Old

If you could pick one major issue that stands out above all others relevant to transplantation, what would you select?

AD: The primary issue comes back to the organ shortage. Until some solution is forthcoming to resolve the shortage of organs, transplantation for most people will not happen—unless they have a living donor. If they don't have a living donor, then many, many people on the waiting list will never get an organ and will die waiting for one.

Student Rounds: *Taking the CSE*

By Russ Willcutt

While physicians have an array of testing equipment to rely on in making their diagnoses, perhaps the most important tools they possess are their interpersonal skills and powers of observation. The Objective Structured Clinical Examination (OSCE) was developed at the University of Alabama School of Medicine to measure medical students' abilities in the examination room—that all-important first meeting with a patient, when trust and an open line of communication must quickly be established. The following is a candid conversation about the OSCE—and the national Clinical Skills Examination (CSE) that all medical students will be required to take beginning in 2005—with three UASOM students who have had experience with the OSCE: Vishakha (Vickie) Modi Sharma, M.D.; Karin Hardiman, M.D., Ph.D.; and Dave Roy.



Vickie Sharma



Karin Hardiman



Dave Roy

Where do you stand at this point in your medical education?

Vickie Sharma (VS): I've just graduated, and I've started my preliminary medicine year at Brown. From there I'll shift to my dermatology residency at the University of Chicago. I plan to specialize in pediatric dermatology, either in Boston or Chicago.

Karin Hardiman (KH): I'm an M.D./Ph.D. student, and I've just graduated, too. I'm doing my surgical residency in Portland, Oregon, and hopefully a fellowship in surgical oncology after that. And I definitely want to continue doing research as well.

Dave Roy (DR): I'm actually a special case, because I've finished my fourth year of medical school, but I decided to put off graduating for a year to take part in a student research program at the NIH. I'm planning to focus on either neurology, psychiatry, or neuro-radiology—something related to the brain.

Taking OSCEs has been a big part of your education so far. Could you describe the experience?

VS: We take them throughout medical school, at the end of our first, second, and third years. The first test isn't as difficult as the ones that follow, because we've only had a year of training at that point, but it grows in complexity with each passing year. The first OSCE focused on taking the patient's history, for the most part, and the second one also involved doing a physical. By the time you get to the third OSCE, you're expected to be able to do all that and more, all the way through diagnosis and treatment.

DR: As for what's actually involved in the tests, you basically have to see a certain number of simulated patients—people who've been trained to present with certain illnesses and are paid for their time. You start outside their exam-room door, where you read over some instructions and a brief description of what to expect, and then you enter the room, examine the patient, do a history, and read the chart, all within a set amount of time. Then, outside the room, another staff member who's been observing you gives you feedback, checking off the things you did and didn't do. While there are about four patients in the earlier tests, the last one is much harder, with between eight and 10 patients to examine.

Does this describe your experience as an M.D./Ph.D. student, Karin?

KH: Yes, in terms of the tests themselves, but the way our program is structured, students complete their first two years of medical school, then spend three years on the Ph.D. portion, and then return for the final two years of medical school. Because of that, when you take your third-year OSCE you're off-cycle with the medical students and haven't had as much time to prepare. I had to take mine after I'd had only two rotations since coming back to medical school, so that made it a little harder. A study guide is available, though, and it describes how to conduct a physical examination and what different symptoms mean, so that's very helpful. Taking the test was a little nerve-wracking for me, but the main thing is that you just have to remain calm and stick to the basics.

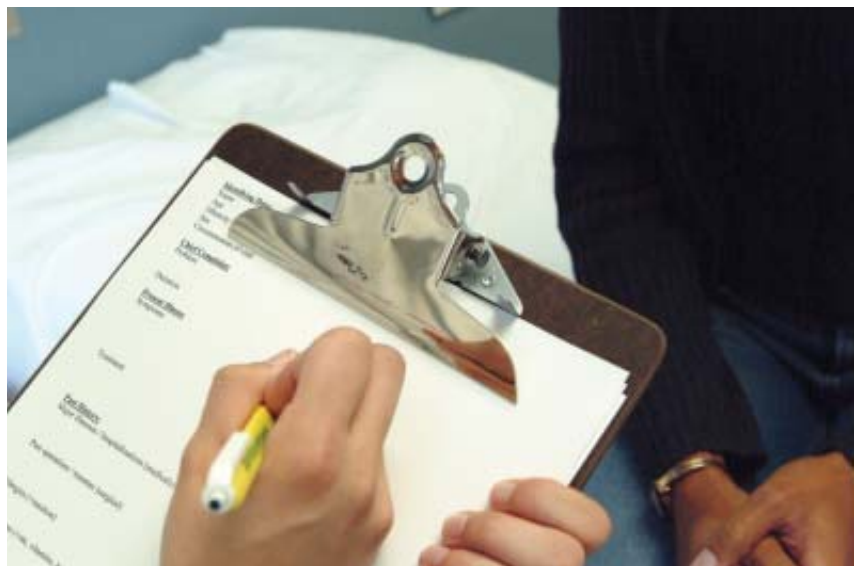
Since the national CSE begins in 2005, you're the only student in this group who'll have to take it, Dave.

DR: That's right, and since I haven't scheduled it yet, I'm not sure where I'll have to go. The CSE will be held at regional locations around the country, and I don't know if that means I can sign up for it somewhere near Bethesda or if I'll have to go to Atlanta, which is the site nearest UAB. Plus it's going to be pretty expensive. In talking with my classmates I've often heard them mention how much taking the test will cost. Between the fee for taking the exam, which isn't included in our tuition, and travel expenses, it will cost somewhere in the neighborhood of \$1,000 or more, which isn't always easy for a med student to come up with.

Do you think the exams are useful?

KH: I've heard some people say that they wonder how all the tests that we've taken throughout medical school—the individual OSCEs that we complete after our different rotations—can sort of be rolled up into one right there at the end. Maybe one person will have made their pediatric rotation 12 months prior to taking the CSE, depending on when they're scheduled to take it, and if they're an M.D./Ph.D. student, they may not have made certain rotations at all. Apart from that, I am impressed with the school's efforts to prepare its students for the tests. As part of the renovations to Volker Hall, two floors have been set aside just for conducting the OSCEs. When I was in my first two years of medical school, which was before the building was renovated, the exams were held at different locations around campus—in clinics that were empty for an afternoon, for instance—and it's so much better for them to be held in a space that's designed specifically for that purpose.

VS: I think the exam is useful in other ways, though, and that an important part of it is how you come across to your patients—how well you've managed to develop your interpersonal skills. While they can use multiple-choice exams to test you from an academic standpoint, the doctor-patient relationship is critical to being able to make a correct and timely diagnosis, so it's important to work on that aspect of your skills so that you'll come across as a confident—and competent—physician.



All U.S. medical students must take the new Clinical Skills Examination starting in 2005, but UASOM students have a head start on this test of their diagnostic skills and bedside manner. They take the school's similar Objective Structured Clinical Examination in each of their first three years, rotating through a series of simulated patient encounters.

PATHFINDER

Humphry F. Osmond, M.D.

By Anita Smith • Photos Courtesy of UAB Archives

When Humphry F. Osmond, M.D., died of cardiac arrhythmia on February 6 in Appleton, Wisconsin, the 86-year-old British-born psychiatrist left a legacy of accomplishment and controversy.

Osmond treated mentally ill patients with what at the time were unorthodox diet changes and large doses of vitamins. This included patients at Bryce (State Mental) Hospital in Tuscaloosa, Alabama, where he was a psychiatrist during the 1970s and 1980s.

MEGAVITAMINS AND HALLUCINOGENS

In earlier decades Osmond had researched the use of controversial hallucinogenic drugs to treat psychiatric illnesses and had treated alcoholics with LSD. He gave British novelist/essayist Aldous Huxley the hallucinogenic drugs that led to experiences Huxley described in his 1954 book *The Doors of Perception*. And in 1957, Osmond coined the term “psychedelic.”

As treating patients with hallucinogens became more controversial and more difficult, Osmond focused on other innovative treatments for mental illnesses. He became especially known for his use of megavitamins.

While based in Tuscaloosa, Osmond often came to Birmingham to consult on research in the UASOM's Department of Psychiatry, where he was a professor. He worked closely in that department with his longtime friend, noted British-born research scientist/psychiatrist John R. Smythies, M.D., whom he had met when they were fellow psychiatry residents in London. In 1952, Smythies and Osmond co-authored a groundbreaking scientific paper linking schizophrenia to biochemical imbalances—a major departure from a widely held theory that schizophrenia resulted from a traumatic upbringing by a bad mother.

THE METTLE OF THE PIONEER

“Humphry was very courageous,” says Smythies, who retired from UAB in 1989 and now holds a post-retirement research-scientist position at the University of California in San Diego. “Humphry was a pioneer. Many pioneers



Top: In the 1950s, Humphry Osmond pioneered medical research into hallucinogenic drugs. Bottom, left: John Smythies. Bottom, right: Smythies and mental-health advocates Glenn and Mallie Ireland drew Osmond to Alabama.

are not very popular. Humphry advocated use of multivitamins long before so many accepted it, and he often was treated badly and had to suffer. I recall him as such a fine human being, including being very compassionate to his patients.”

In the early 1970s, Glenn Ireland, the Birmingham philanthropist and mental-health advocate who would later become Alabama's mental-health commissioner, suggested that the university should hire Osmond. Ireland and his wife, Mallie, knew both Smythies and Osmond well; Smythies held a professorship associated with one of two endowed psychiatric-research chairs the Ireland family funded at UAB.

“Dr. Humphry Osmond did wonderful things to help Alabama mental patients,” says Glenn Ireland. “Before Humphry came to Bryce, many schizophrenic patients there were told they were imagining things when they reported seeing far-out images such as pink elephants or reindeer on the ceiling. However, Humphry explained to such patients, ‘Yes, you do see these things—because your body is manufacturing chemicals that are causing you to see these things.’”

Mallie Ireland remembers Osmond's versatile intellect: “Humphry wrote brilliant opinions on many topics and distributed them to friends in the form of memos. Being British, he pronounced that as his ‘meemos.’ I treasure my copies.”

One of Mrs. Ireland's favorite stories about Osmond came from two young men who had been his students at the New Jersey Psychiatric Institute in Princeton, just before he moved to Alabama. “These two young men traveled to Alabama to help Humphry and his wife move in and get settled,” she recalls. “They said while they were unloading things from the moving van, to

their great surprise they looked up and saw this little red Volkswagen Beetle come rolling out—Humphry's Beetle. Typical of Humphry, that little car was packed full of what seemed to be tons of books.”

TRAILBLAZER

Peyton T. Taylor, M.D.

By Lori Herring

When he was a little boy, Peyton Taylor delivered medications to doctors' offices in Tuscaloosa from his father's apothecary shop. Taylor came to know the ins and outs of the medical profession at an early age, and from the beginning he was hooked. He went on to attend the University of Alabama at Tuscaloosa, then, in 1963, entered double duty as a freshman medical student in the UASOM and a graduate student in medical genetics under Drs. Wayne and Sara Finley. Taylor graduated in 1968 with both a master's degree and a doctorate in medicine.



"I am a product of the University of Alabama," he says. "All my formative training was at UAB, and those formative years set your course." Taylor's course took him from med school—during which he completed research for his master's degree at the University of Uppsala in Sweden—to the National Cancer Institute, where he spent two years in cancer research.

"I had never really thought about cancer as a field," Taylor says. "But I had developed a deep interest in basic genetics and cell division, and I was captivated at UAB by Dr. Kirklin and by surgery. At the National Cancer Institute, I saw how to combine my earlier research interests with surgical oncology."

Taylor went on to the University of Virginia, where he studied with W. Norman Thornton, M.D., a professor prominent in the treatment of cancer in women. Afterward, Hugh Shingleton, M.D., recruited Taylor to come work with him and Hazel Gore, M.D., at UAB in what was then a brand-new women's cancer program.

"It was a great time to be at UAB," recalls Taylor, who says he worked under "individuals with tremendous vision." He spent just two years on the faculty before he went back to UVA to set up a women's cancer division based on the UAB model. And there he's stayed.

A GIFT TO REMEMBER

Since then, Taylor has been awarded the Distinguished Alumnus Award from the Alabama Medical Alumni Association in 2000, and this year was elected vice president of the Society of Gynecologic Oncologists, the most prestigious international society dedicated to improving the care of women with reproductive-tract malignancies. Perhaps the biggest honor he's received, though—at least in terms of dollars—is a large gift the family of a grateful patient made to the University of Virginia. Taylor had treated the patient for a rare tumor, and she recovered; her family provided a gift of \$2.2 million in July 2003 to be spent at Taylor's discretion for research in women's oncology.

The first thing Taylor did with the windfall was to set up a research program consisting of projects in five labs, all investigating various aspects of cell signaling, with a focus on uterine tumors. The projects were up and running by September 2003.

Taylor also leveraged part of the money with an investment from UVA's Department of Pathology in order to establish a formal fellowship training program in gynecologic pathology with the purpose of bringing promising young physicians to UVA to understand the pathology of gynecologic cancers on a molecular level. The first fellow began in July 2004.

But Taylor still needed to buy consumable supplies and research equipment. Within a month, Mr. and Mrs. John Roberts of Richmond, Virginia, gave the university an unrestricted \$100,000 gift. The Robertses knew the initial donor and knew Taylor's needs. "I've tried to use the extremely generous gifts of both donors wisely, to make them proud of what they've done," Taylor says. He stays in touch with both sets of donors to give them regular progress reports.

Taylor is grateful to have spent his formative years in medicine at the UASOM, where he says he acquired the medical mindset he retains today. The civil-rights struggles of the 1960s were a difficult time for Birmingham, but Taylor wouldn't have wanted to be anywhere else.

"The medical school and university weren't perfect, but they were visionary institutions and leading the way," he says. "The medical center became a beacon of light in a city that had temporarily gone astray. World-renowned leaders in medical thought thrived there and provided so generously of their time and attention to 'just another medical student.'"

"There was the visionary leadership provided by Drs. Volker, McCallum, Hill, and Pittman in recruiting and retaining outstanding and innovative medical faculty," Taylor recalls. "And the inspirational educators and attending physicians, such as Tinsley Harrison, Gene Ball, Hugh Dempsey, John Kirklin, Holt McDowell, Sara Davis, and Sara Finley—all of whom provided such personal inspiration and guidance. They were outstanding role models for me and many, many others at a very impressionable point in our lives. It certainly lit a fire under me. It was extremely inspirational, and still is."

Editor's Note: In this issue of the *Alabama Medical Alumni Bulletin* we are adding two new columns that will chronicle the UASOM's tradition of accomplishment. "Pathfinder" looks back on the life and work of noted faculty and alumni; "Trailblazer" showcases the work of practicing alumni.

From the Development Office

Generous Gift Funds UAB Neuroscience Research Programs

The Evelyn F. McKnight Brain Institute and Endowed Professorship

By Norma Butterworth-McKittrick

The McKnight Brain Research Foundation recently awarded UAB a \$5-million grant to support research in age-related memory loss at the School of Medicine's Department of Neurobiology. The grant will be used to establish the Evelyn F. McKnight Brain Institute, which will be housed in the state-of-the-art Richard C. and Annette N. Shelby Interdisciplinary Biomedical Research Building, scheduled to open in 2005.

The chair of the department, Michael J. Friedlander, Ph.D., will hold the Evelyn F. McKnight Endowed Professorship for Learning and Memory in Aging, also established with the grant funds. Friedlander and his team are investigating the fundamental mechanisms that underlie the neurobiology of memory in the human brain with a clinical relevance to the problems of age-related memory loss. Their long-term objective is translating basic biomedical research into processes and products to minimize the deleterious

effects of aging on learning and memory. The grant funds will provide for faculty salaries, purchase of laboratory instrumentation, pilot research funding, and other scholarly activities related to their research and study.

Established in 1999 by Evelyn Franks McKnight, the McKnight Brain Research Foundation supports research toward the understanding of memory and the specific influences of aging on memory. Evelyn, who was a nurse, shared her husband's belief that "research is the key to tomorrow." She and William L. McKnight, who served as chairman of the board of the Minnesota Mining & Manufacturing (3M) Corporation for 59 years prior to his death in 1978, were particularly interested in the effects of aging on memory. She continued to support his interest in brain research and memory loss until her death in 1999. Now her legacy continues through the McKnight Brain Research Foundation.

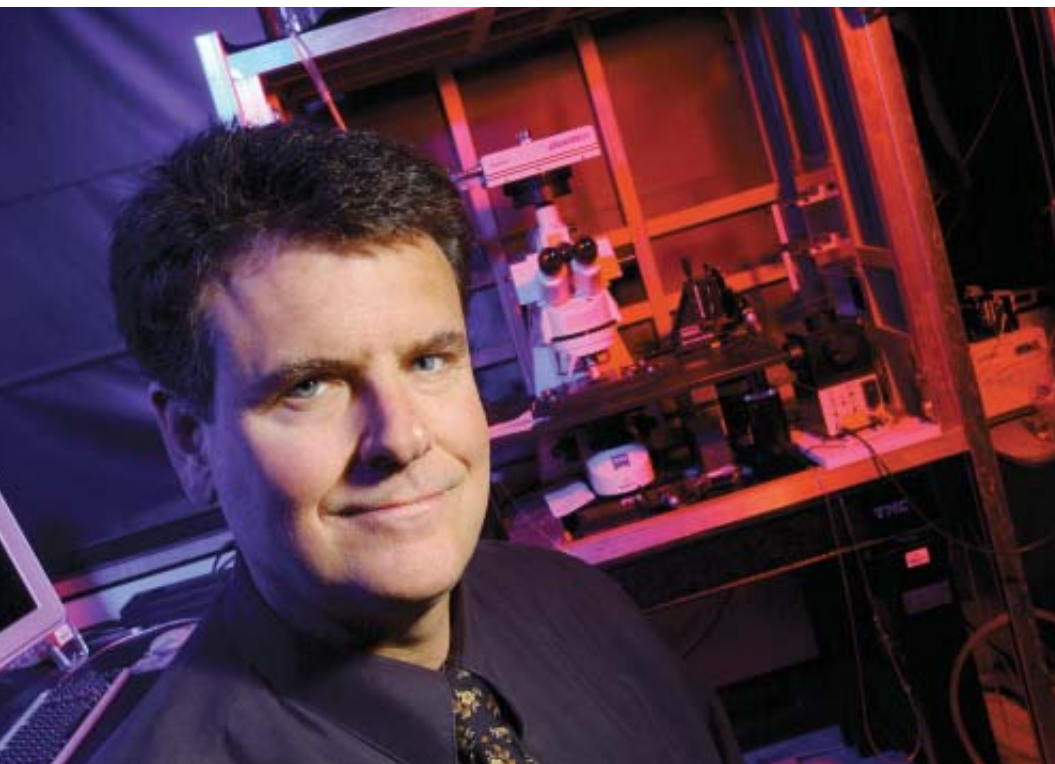
"The population is growing daily, and by the year 2030 it is estimated that nearly 25 percent of Americans will be 65 or older, with millions suffering some form of memory loss," notes J. Lee Dockery, M.D., one of the trustees of the McKnight Brain Research Foundation. "Finding the answer to this important health-care problem potentially can have a tremendously beneficial influence to every member of our society."

"The partnership between the McKnight Brain Research Foundation and our Department of Neurobiology has enormous potential to advance our understanding and treatment of age-related memory loss," emphasizes Senior Vice President and Dean Robert R. Rich, M.D. "We thank the trustees of the foundation for their interest in the scientific expertise we can apply to this significant health issue."

PROGRAMS WORTH SUPPORTING

Department of Neurobiology

By Matt Windsor



Neurobiology chair Michael Friedlander says his department's research will offer clinical solutions to medical and social problems, including addiction and sleep disorders.

When your field of interest is as vast and mysterious as the human brain, there is never a shortage of nooks and crannies to investigate. Handing out the searchlights and wielding his own as founder and chair of the Department of Neurobiology, Michael J. Friedlander, Ph.D., is excited about UAB's successes in exploring the dim recesses of the mind, even as he is aware that there is still a lot of ground to cover.

"Unlike many organs of the body, about which we have learned a tremendous amount over several centuries, we're still very challenged to understand how the brain works as a whole," says Friedlander, who is also director of the UAB Civitan International Research Center. "We want to know how the biology of the living brain ultimately translates into what we call the 'mind.' When it comes to the brain, making the connection between molecular and cellular functions and the higher-order processes that underlie behavior and intelligence has been very difficult."

There has been a lot of progress in the last decade or two, however, says Friedlander, and Department of Neurobiology researchers are working to make the "mind-brain" connection on many levels at once. "We have people who study the brain at the level of genetics, molecular biology, and physiology," he says. "But we also have people who use information processing, mathematics, and behavioral analysis—then we have to put all that together." Combining the "bottom-up" approach of the lab with the "top-down" approach of clinical patient

work is a challenge, Friedlander explains, but “the hope is that we meet somewhere in the middle. This type of interdisciplinary neuroscience research is very much at the heart of what National Institutes of Health director Dr. Elias Zherhouni calls the road map to team-oriented biomedical science.”

Putting it together will yield clinical solutions to vexing medical and social problems, says Friedlander. Researcher Harald Sontheimer, Ph.D., has made “many novel discoveries,” in developing a naturally occurring molecule that can target and destroy deadly brain-tumor cells. The roots of nicotine addiction and its link to the body’s dopamine reward system is the focus of research by Robin Lester, Ph.D. Work on mouse genetics by Scott Wilson, Ph.D., has revealed an important pathway implicated in human neurodegenerative diseases, such as inherited movement disorders, and is providing novel insights into disorders such as Parkinson’s disease.

Michael Brenner, Ph.D., has developed a clinical screen for parents who are at risk for passing on genes to their children that increase the risk for a rare, devastating disorder of the development of the brain’s support cells (glia) called Alexander’s disease. Anne Theibert, Ph.D., is working out the molecules and their targets that regulate the ability of nerve cells to grow and make connections. And Friedlander and sev-

eral other researchers, including Lynn Dobrunz, Ph.D., Lucas Pozzo-Miller, Ph.D., and Lori McMahon, Ph.D., are working on different aspects of the brain’s ability to learn and remember during early development and throughout life, and how compromises to these processes can lead to mental retardation in children and dementias in older adults.

A major function of the brain that keeps activity in check, preventing overactivity (seizures), is inhibition, which also strongly regulates mood and states such as anxiety and sleep. David Weiss, Ph.D., and John Hablitz, Ph.D., investigate the molecular and cellular aspects of these processes, respectively, providing insights into potential therapeutic targets. Sleep is an essential part of everyone’s daily rhythm and perturbations in this circadian process can have devastating consequences for one’s performance and quality of life. Stuart Mangel, Ph.D., and Yi Zhou, Ph.D., study the chemical signaling pathways and nerve-cell circuits that control these daily rhythms.

Genetics and functional brain imaging are two key aspects of future research. The department will soon have its own functional magnetic resonance imaging (fMRI) unit, which will “allow us to look at how the brain is processing information when a person is reading, or communicating with someone else, or learning new things,” Friedlander explains.

“We’re beginning to look at how the whole brain is functioning in the intact person... then we’re going to put that together with what we’ve learned about genetics, and what we’ve learned about molecular biology and physiology, to see if we can understand what’s going wrong. This approach is offering powerful new insights into the underlying biological basis of cognitive processing in disorders such as autism-spectrum disorders and impoverished interactions between mothers at risk for child neglect and their babies.”

One thing that won’t change is the emphasis on interdisciplinary collaboration. As one of UAB’s eight Joint Health Science departments, Neurobiology is based in both the UASOM and the School of Dentistry. Next year, the department will move most of its faculty and research labs into the new Richard C. and Annette N. Shelby Interdisciplinary Biomedical Research Building, although the fMRI research will remain in the Civitan building. “Instead of us all just being lumped together on one floor, we’ll be dispersed over several floors organized around these thematic research groups,” Friedlander says. “And there’ll be people from other departments in labs next to us that are doing related research in these groups.”

“One of the great strengths of UAB, of course, is that we don’t get stuck in departmental boundaries. Our programs extend out, and our faculty can be involved in this very broad, interdisciplinary research.”

Alumni Offer Challenge Grant for Neurobiology

Physically and geographically, Angel and Mike Williamson couldn’t have started out much farther apart. Angel is four feet ten inches tall and from Taipei, Taiwan. Mike is six foot three and from Decatur, Alabama. Nevertheless, this husband-and-wife team, currently practicing together at the Angel Williamson Imaging Centers in Pensacola and Fort Walton, Florida, say they owe their careers—and their marriage—to the UASOM. The 1979 graduates trace their romance back to long study sessions in Volker Hall, and their choice of specialties to outstanding mentors, including Julius Axelrod, Ph.D., Connie Pittman, M.D., and Eva Dubovsky, M.D.

But it was on a trip to Birmingham a few years ago that the couple learned about the emergence of the school’s Department of Neurobiology as a world-class program. Driving up for daughter Eva’s medical school interview at the UASOM, the Williamsons were able to schedule a tour of the neurobiology facilities with chair Michael J. Friedlander, M.D., and were astonished to discover the breadth of cutting-edge research being carried out at UAB. They were so impressed, in fact, that they have offered challenge funds to encourage donations to the department. Donations by alumni, other individuals, and private organizations up to \$25,000 will be matched equally and used exclusively to promote graduate neurobiology education at the UASOM.

“For the scientifically curious, few mysteries are more exciting than those of the human brain,” says Mike Williamson. “As physicians, our



The Richard C. and Annette N. Shelby Interdisciplinary Biomedical Research Building.

focus is on disease. But it is the normal brain, not the diseased heart or kidney, which creates the astonishing chemistry of self-awareness. And for those whose primary concern remains disease, there is none more complex, or in greater need of basic research, than mental disease. What better program to bring scientific recognition to Alabama during the ‘century of the brain?’”

For more information, please contact Brett Scullen at (205) 975-7240.

North Carolina Alumnus Remembers School of Medicine

By Matt Windsor



Barbara and Edward Beason

After medical school, many UASOM alums disperse around the country to finish their educations and build careers. But memories of the city and the school often run deep. That is the case with alumnus Edward Stewart Beason, M.D., who grew up in Birmingham and graduated from the School of Medicine in 1963. Beason went on to complete a surgery residency at the Bowman Gray School of Medicine in Winston-Salem, North Carolina, and a plastic surgery residency at the Baroness Erlanger Hospital in Chattanooga, Tennessee.

Now retired after practicing for 30 years in Winston-Salem, he continues to be involved in charitable work in North Carolina and the third world. The Edward S. Beason and Barbara T.

Beason Advised Fund has contributed to several projects benefiting disadvantaged children in North Carolina.

But Beason has not forgotten the start he received in Birmingham. He and his wife established a charitable remainder trust that will, upon their deaths, return an annual payment to help further the education and research missions of the UASOM. The generous gift was unknown to school officials until recently, when development director John C. Lankford, Ph.D., a childhood friend of Beason's, met with him in North Carolina. If you are interested in establishing a trust to benefit the UASOM, please contact Jennifer Philpot at (205) 975-7298.



The Tone Your Bones Web site takes visitors on a simulated trip through UAB's Osteoporosis Treatment and Prevention Clinic.

Tone Your Bones: *Virtual Checkup*

By Matt Windsor

The UAB Osteoporosis Treatment and Prevention Clinic took its fight against the condition online in 2003 with the debut of Tone Your Bones, an interactive, information-packed Web site designed to simulate a visit to the clinic.

Less than a year later, the site has won a gold medal from the Health Information Resource Center and is only getting stronger, with regularly updated links to news and research on osteoporosis. The site, [www.toneyourbones.org], follows the same six steps a clinic patient would take, prompting visitors to conduct a self-evaluation, providing information on bone-density testing and nutrition, listing questions to ask at a doctor's appointment, giving tips on

proper balance and posture, and helping in preparation of a personal treatment plan.

The easy-to-understand layout is heavily illustrated, with photographs showing visitors ways to carry out daily tasks—getting out of bed, brushing teeth, sweeping, gardening—in ways that help prevent injury. A section on exercise gives advice on the proper duration and intensity of workouts, both weight-bearing and strength training.

Site visitors are also encouraged to interact with Tone Your Bones staff by calling a toll-free information hotline with questions, attending a free weekly lunch with a physical therapist and dietician, or joining the Tone Your Bones Exercise Group.



COMER FOUNDATION LUNCHEON

The School of Medicine recently hosted a luncheon for the Comer Foundation Board and recipients of the Comer Foundation Medical and Nursing Scholarships. The foundation awards eight scholarships each year to support the education of outstanding students enrolled at UAB.

Front Row

(left to right) Jennie Stryker (School of Nursing); Katherine Trucks (School of Medicine); Patrick Grant (School of Medicine); Alan Aikens (School of Medicine);

Back Row

(left to right) Miranda Spurlin (School of Nursing); Nathan Smith, M.D. (assistant dean for admissions, School of Medicine); Jane Selfe; Francis Crockard; Hugh Comer Nabers; Rachel Booth, Ph.D. (dean, School of Nursing); Gillian Goodrich; George Hipp (School of Medicine);

Not Pictured

Krystal Stenson (School of Nursing).

RECEPTION HONORING MAJOR CONTRIBUTORS AND HILL SOCIETY MEMBERS

On October 28, 2004, the University of Alabama School of Medicine at UAB recognized its major contributors and S. Richardson Hill Society members with a reception. This special event was held at the Birmingham Museum of Art and was hosted by President Carol Z. Garrison, Ph.D., and Senior Vice President and Dean Robert R. Rich, M.D.

1. Peter Worthen, Sally Worthen, and J. Claude Bennett, M.D.

2. Tina DiMonte, Chris Stephens, Nancy Austin, and J. Max Austin, M.D.

3. Eli Capilouto, D.M.D., Mary Lynne Capilouto, D.M.D.,
Lilliane Koopman, William Koopman, M.D.

4. David Silverstein, Susan Silverstein, and Janet Hill

5. Torrey Smitherman, David Hoidal, Margaret Hoidal, and Carey Hinds

6. Coquette Barnes and William Barnes

7. Kim Ob, M.D., and Shin Ob, M.D.

8. Rosalie Cooper and Max Cooper, M.D.

9. Jack Tomlinson and Jean Tomlinson

10. Robert R. Rich, M.D., and James A. Pittman, M.D.

11. Joyce Stein, Eleanor Grossman, and Gaston Stein

12. Carol Z. Garrison, Ph.D.



Membership in the Hill Society is open to all alumni, friends, faculty, and staff of the School of Medicine. This is an elite group of supporters who each contribute \$1,000 or more annually to the school. If you would like additional information, please see the enclosed envelope or contact Meredith Murdock in the Medical Development Office at (205) 934-4469.

1958
RUFUS LEE JR. was one of three recipients of the Ira L. Myers Service Award at the Medical Association of the State of Alabama's annual Inaugural and Awards Dinner in May. The Myers Award is presented to outstanding physicians who have served the medical profession faithfully and meritoriously during their lifetimes. Lee is retired from his medical practice in allergy medicine and lives in Dothan, Alabama.

1964
ELLEN L. MARMER was elected mayor of the town of Vernon, Connecticut, in November 2003. She is married to Harold O. Shapiro, M.D., of the class of 1963. Her specialty is pediatric cardiology.

1968
R. BOB MULLINS JR. was named president of the Medical Association of the State of Alabama for 2004-2005 at the association's annual Inaugural and Awards Dinner in May. Mullins has a family practice in Valley, Alabama.

1972
W. MARTIN HASKELL was elected vice president of Beta Theta Pi General Fraternity at the fraternity's annual convention in Atlanta, Georgia, on August 7, 2004. He will serve a three-year term on the Board of Trustees. Haskell was awarded Regional Director of the Year honors at the General Convention this summer and served the post for Region H for two years (2002-4). He lives in Cincinnati, Ohio, and specializes in gynecology.

1974
WILLIAM M. LIGHTFOOT received the Paul W. Burleson Award at the Medical Association of the State of Alabama's annual Inaugural and Awards Dinner in May. The Burleson Award is presented in recognition of a medical career that encompasses not only high ethical and professional standards in patient care, but also extraordinary service to physician organizations at all levels. The recipient must also have served as a mentor or role model for fellow and future physicians. Lightfoot specializes in general surgery and lives in Mobile, Alabama.

WILLIAM L. ROPER received the Medical Association of the State of Alabama's top honor, the Samuel Buford Word Award, at the association's annual Inaugural and Awards Dinner in May. The Word Award is presented to a physician in recognition of service to humanity beyond the usual scope of medical practice. In March, Roper was named dean of the School of Medicine and vice chancellor for medical affairs at the University of North Carolina at Chapel Hill and CEO of the UNC Health Care System. He specializes in public health and general preventive medicine and lives in Chapel Hill, North Carolina.

1981
KEN B. WAITES has been named to a two-year term (July 2004-July 2006) as chair-elect of the Inter-

national Organization for Mycoplasma (IOM), after which he will serve as chair for two years. Founded in 1976, the IOM is a non-profit organization that promotes the international study of mycoplasmas, the smallest free-living microorganisms, and disseminates knowledge about diseases they cause, their biological characteristics, effects, transmission, and control. The IOM's more than 500 microbiologist members represent 28 different countries. Waites is professor of pathology at the UASOM, specializing in medical microbiology. He lives in Birmingham.

1989
EDMUND S. KIM co-authored the book *Healthy Transitions: A Woman's Guide to Perimenopause, Menopause & Beyond* (Prometheus Books, 2004), a comprehensive, user-friendly guide for women experiencing perimenopause (the time leading up to menopause) and menopause. Topics explored include hot flashes, night sweats, changes in menstrual cycle, mood swings, weight gain, changes in sex drive, natural remedies, and screening tests. Kim specializes in gynecology and lives in Lawrenceville, Georgia.

1994
FRANK K. NOOJIN has joined the Moore Orthopaedic Clinic, PA, in Columbia, South Carolina. He previously practiced in Greenville, S.C., where he was team physician for the Greenville Grrrowl ECHL ice-hockey team and served as clinical faculty for the orthopaedic surgery department at Greenville Memorial Hospital. He specializes in orthopaedics/sports medicine and is certified by the American Board of Orthopaedic Surgery.

BRUCE S. HILL is owner and president of Crossroads Arthritis and Wellness Center, which opened on May 3, 2004, in Charlotte, North Carolina. Hill resides in Charlotte, and specializes in rheumatology.

1995
LEONARD W. JONES III is chairman of the Department of Medicine at DCH Regional Medical Center in Tuscaloosa for 2003-04, and has been a member of the Tuscaloosa County Board of Health since 2002. His specialty is internal medicine.

STEVEN D. PRESLEY was promoted to program director of the Transitional Year Residency Program at Baptist Health System in Birmingham on August 1, 2004. He continues to serve on the full-time faculty for the Internal Medicine Residency Program. Presley lives in Birmingham and specializes in internal medicine.

1997
SARAH LYNN BISCH joined the University of California in San Diego Children's Hospital in July as an assistant clinical professor. She is board-certified in adult and child psychiatry and works as a child psychiatrist at UCSD's satellite clinic in Oceanside. Bisch will co-lead the therapeutic interventions didactic seminar for child/adolescent psychiatry fellows. She lives in Carlsbad, California.

In Memoriam

WILLIAM MICHAEL "SONNY" BROCK, 1943 graduate of the two-year medical school, died June 4, 2004. He lived in Montgomery and specialized in pediatrics.

RICHARD F. BLISS, class of 1950, died April 8, 2004. He lived in Talladega and specialized in general practice.

MARY AKEROYD ALFORD died April 26, 2004. She was the wife of Charles Aaron Alford Jr., class of 1955. Charles specializes in infectious diseases and lives in Birmingham.

WILLIS DWIGHT COLBY ISRAEL, graduate of the class of 1955 and a 1956 resident, died July 24, 2004, in Tuscaloosa. He lived in Wedowee, Alabama, where he had a family practice from 1956 to 1991.

WILLIAM CAREY WALLACE, class of 1966, died after a lengthy illness on May 24, 2004. He was a resident of Birmingham and specialized in family practice.

JOHN M. HIGGINBOTHAM, father of John A. Higginbotham, class of 1972, died August 5, 2004. He was an orthopaedic surgeon in the Birmingham area for more than 40 years and lived in Hoover.

VIVIAN HICKS HUDSON, mother of Hank Hudson, class of 1975, and Dan Hudson, class of 1990, and mother-in-law of Roy Baker, class of 1976, died May 31, 2004.

STEVEN R. MONSON, class of 1982, died in September 2003. He lived in Gulf Shores, Alabama and specialized in emergency medicine.

Alum Babes

MARY E. MIHALEK, class of 1994, and husband Michael announce the birth of their third child, Jack Mihalek, born on February 17, 2004. Jack joins his brother Brooks and sister Anna. Mary specializes in obstetrics and gynecology. The family lives in Farmington, Connecticut.

ELIZABETH HUDDLESTON BURGESS, class of 1996, and her husband, John, proudly announce the birth of their son Andrew Charles Burgess on March 1, 2004. He joins his twin brothers Josh and Alex, who are 3 years old. Beth works at the Atlanta VA Medical Center in internal medicine and endocrinology. The family lives in Decatur, Georgia.

RAJ VARMA, class of 2001, and his wife, Michele, announce the birth of their daughter, Caroline Varma, born June 22, 2004. Raj is a U.S. Navy flight surgeon, and was deployed in the Arabian Gulf for six months. He is stationed aboard the *USS George Washington*.



HONORS CONVOCATION: *May 16, 2004*

The graduates of the class of 2004 were recognized on Sunday, May 16, 2004, at the annual honors convocation held at the Birmingham-Jefferson Civic Center and Concert Hall. William B. Deal, M.D., dean of the UASOM, presided.

Betty W. Vaughan, M.D., president of the Medical Alumni Association, spoke briefly to the graduates, welcoming them into the Alumni Association. Each graduate was presented with a certificate of membership. Vaughan also presented the Alumni Award for Leadership and Community Service, which included a check for \$500 from the Medical Alumni Association to the recipient.

Ronald W. Orso, M.D., president of the Caduceus Club of the Medical Alumni Association, presented the two faculty awards sponsored by the Caduceus Club. Each award included a check for \$1,000.

THE CADUCEUS CLUB AWARDS

Best Clinical Professor

Craig J. Hoesley Jr., M.D.

Best Basic Science Professor

Sadis Matalon, Ph.D.

SCHOOLWIDE ACADEMIC AWARDS

Hugh J. Dempsey Memorial Award

Lacey Mitchell Thomas

A remembrance of the late Hugh J. Dempsey, M.D., professor of medicine, this plaque and prize are presented annually as the highest award to a member of the graduating class. The award is based on cumulative academic achievements during the entire four years as a student at the University of Alabama School of Medicine.

The Leonard Tow Humanism in Medicine Awards for a Student and Faculty Member

Presented by the Arnold P. Gold Foundation

Louis W. Heck Jr., M.D.

Patrick James Klemawesch

This award is presented in recognition of the value of humanism in the delivery of care to patients and their families.

Medical Assurance Award for Excellence in Patient Communications

Chere' Michelle LeBerte

Nicholas Jay Van Wagoner, Ph.D.

Consisting of a prize and plaque, this award acknowledges excellence in patient communication for a senior completing postgraduate medical education in the state of Alabama.

Alumni Award for Leadership and Community Service

Robert Lee Oldham

This prize and plaque are presented to acknowledge outstanding leadership and community service.

The Glasgow-Rubin Achievement Award Presented by the American Medical Women's Association

Lacey Mitchell Thomas

This award recognizes a female class member should she graduate first in her class.

The Glasgow-Rubin Achievement Citation Presented by the American Medical Women's Association

Danette Leigh Dudney

Marwa Ali El-Menshawi

Kathleen Ellis Gee

Vishakha Modi Sharma

Heather Marie Taylor

Marina Lynn Thompson

This award recognizes the remaining female class members in the top 10 percent of the class.

The Merck Manual Award Presented by Merck and Company, Inc.

Danette Leigh Dudney

Marwa Ali El-Menshawi

Rory Covette Farris

Alexander Victor Talalight

This award is presented to four outstanding students in medical studies.

William Boyd Medal Presented by the Alabama Association of Pathologists

Yara Mariam Audeh

This award is presented for exceptional performance in pathology.

The Stuart Graves Pathology Award

Lacey Mitchell Thomas

This award is presented for excellence in pathology during the sophomore year.

The J. Garber Galbraith Memorial Award in Human Anatomy

Danette Leigh Dudney

Lacey Mitchell Thomas

This award is presented for excellence in human anatomy during the freshman year.

MEDICAL STUDENT RESEARCH DAY PRESENTERS

Prize Winners Class of 2004

Janna Patterson Bakari

Heather Alicia Hancock

Timothy Paul Hecker

Stephen Joseph Kelly

Vince Thuan Nguyen

Kenan Miles Penaskovic

Robert Francis Sidonio Jr.

Alexander Victor Talalight

Grace Ye-Hwie Wu

SCHOOLWIDE ACHIEVEMENTS

Alpha Omega Alpha

A national medical honor society based on scholarship and high professional qualifications.

Yara Mariam Audeh

Evans Cecil Bailey

Christopher Fenn Baranano

Matthew Lloyd Busbee

Danette Leigh Dudney

Marwa Ali El-Menshawi

Rory Covette Farris, vice president

Kathleen Ellis Gee

Patrick David Grant, president

Blaine Michael Hannafin

Jason Andrew Hoover

Kenneth Benjamin Hughes

Chere' Michelle LeBerte

Howard Cooper Masuoka

Kellie Schneider Matthews

Katherine Elise Perrien

Pavle Repovic

Vishakha Modi Sharma

Alexander Victor Talalight

Heather Marie Taylor

Lacey Mitchell Thomas

Marina Lynn Thompson

Nicholas Jay Van Wagoner, Ph.D.

James Benning Walker

Jeffrey Paul Zwerner

FORMAL ACADEMIC HONORS

The University of Alabama School of Medicine grants honors to the top 10 percent of the class.

Danette Leigh Dudney, summa cum laude

Lacey Mitchell Thomas, summa cum laude

Evans Cecil Bailey, magna cum laude

Marwa Ali El-Menshawi, magna cum laude

Kathleen Ellis Gee, magna cum laude

Patrick David Grant, magna cum laude

Vishakha Modi Sharma, magna cum laude

Matthew Lloyd Busbee, cum laude

Rory Covette Farris, cum laude

Kenneth Benjamin Hughes, cum laude

Alexander Victor Talalight, cum laude

Heather Marie Taylor, cum laude

Marina Lynn Thompson, cum laude

Nicholas Jay Van Wagoner, Ph.D., cum laude

James Benning Walker, cum laude

BIRMINGHAM CAMPUS AWARDS

The Dean's Award

Lacey Mitchell Thomas

This award consists of a prize and plaque for the most outstanding performance in the clinical clerkships.

ACHIEVEMENT AWARDS

Certificates were presented to the following exceptional members of the class of 2004, in recognition of superior achievements in the clinical curriculum at the Birmingham campus.

Yara Mariam Audeh

Frohar Bahiraei

Evans Cecil Bailey

Danette Leigh Dudney
 Rory Covette Farris
 Kathleen Ellis Gee
 Patrick David Grant
 Patrick James Klemawesch
 Howard Cooper Masouka
 Kellie Schneider Matthews
 Vishakha Modi Sharma
 Jeffrey Paul Zwerner

Battle S. Searcy Memorial Award

Robert Lee Oldham
 Kenan Miles Penaskovic

This certificate and prize for the demonstration of the highest performance in psychiatry is presented on behalf of the Department of Psychiatry.

Bruce A. Harris Jr. Award

Kellie Schneider Matthews

The Department of Obstetrics and Gynecology presents this award for outstanding abilities in OB/GYN.

American Academy of Neurology Prize

Daniel Lamar Cobb

This prize is presented for outstanding performance in neurology.

Samuel Clements Little Award

Robert Chad Deal

This certificate and prize are given to a student who demonstrates superior achievement in neurology.

Garber Galbraith Medical Student Award

Thomas Christopher Matthews

This award is presented for excellence in surgery.

G. Gayle Stephens Award

Amanda Leigh Barron

This award is presented to a student who has demonstrated excellence in family medicine.

Paul A. Palmisano Award

Robert Louis Rux

The Palmisano Award is given to a student who demonstrates excellence in pediatrics, a passion for learning, a desire to share knowledge through example, and a compassion for the needs of children and their families.

Tinsley R. Harrison Award

Patrick James Klemawesch

This award is presented for academic excellence in internal medicine.

Robert Goodloe McGahey Prize

John Everett Blake III

An award for the most outstanding performance in anesthesiology, the McGahey Prize is given in memory of Robert Goodloe McGahey, M.D., one of the first physicians to practice anesthesiology in Alabama.

Excellence in Emergency Medicine Award

Blaine Michael Hannafin

This award recognizes excellence in emergency medicine.

Emily F. Omura Award

Lacey Mitchell Thomas
 Jeffrey Paul Zwerner

This award is presented for outstanding performance in dermatology.

Robert J. Stanley Award for Excellence in Radiology

Steven Dustin Bright

This award is presented for outstanding performance in radiology.

Sarah F. Davis Award

James Vann Worthen
 Grace Ye-Hwie Wu

The Sarah F. Davis Award is presented to the best all-around female and male student, as chosen by their classmates. The award of certificate and a check is in memory of Sarah F. Davis, M.D., who was a professor of pediatrics and chair of the School of Medicine's Admissions Committee until her death in 1986. Davis is remembered for her keen intellect, warm sense of humor, and interest in students.

Tinsley R. Harrison Medical Student Society

Christopher Fenn Baranano
 Matthew Lloyd Busbee, president
 Philip Hyungjin Chang
 Brian Thomas Geary
 Uzma Hasan
 Patrick James Klemawesch
 Unni Nair
 Robert Lee Oldham
 Bevelle Warren Worthen
 James Vann Worthen

The Harrison Society is dedicated to the pursuit of excellence through scholarly exchange and research.

HUNTSVILLE CAMPUS AWARDS

Dean's Award for Academic Excellence

Alexander Victor Talalight

This award is presented for the highest academic performance in the clinical clerkships.

Exemplary Academic Performance

Crystal Joy Vlick

This award is presented for the second-highest academic performance in the clinical clerkships.

Executive's Leadership Award

Adam Stanley Green
 Elisa Jane Haley

G. Gayle Stephens Award

Crystal Joy Vlick

This award is presented for outstanding ability in family medicine.

J. Ellis Sparks Award in Internal Medicine

Alexander Victor Talalight
 Crystal Joy Vlick

This award is presented for outstanding ability in internal medicine.

John Di Placido Award in Obstetrics and Gynecology

Alexander Victor Talalight

This award is presented for outstanding ability in obstetrics and gynecology.

John R. Montgomery Award in Pediatrics

Crystal Joy Vlick

Charles Selah Award in Surgery

Alexander Victor Talalight

This award is presented for outstanding ability in surgery.

Award for Excellence in Psychiatry

Alexander Victor Talalight

This award is presented for outstanding ability in psychiatry.

Rachelle Cassity Award for Community Service

Blaine Michael Hannafin

This award is presented for outstanding community service.

TUSCALOOSA CAMPUS AWARDS

Scholastic Achievement Award

Heather Marie Taylor

This award is presented for the highest academic performance in the clinical years.

William R. Willard Award (Dean's Award)

Archie Dean Hooper IV

This singular recognition is awarded annually for outstanding contribution to the goals and missions of the College of Community Health Sciences.

James H. Akers Memorial Award

Dawn Watts Bryant

The senior class annually selects the senior who best personifies both the art and the science of the practice of medicine.

Robert F. Gloor Award

Archie Dean Hooper IV

The Gloor Award recognizes excellent performance in community and rural medicine.

Family Medicine Award

Archie Dean Hooper IV

This award is presented for excellence in family medicine.

William W. Winternitz Award

Heather Marie Taylor

This award is presented for excellent performance in internal medicine.

Finney/Akers Memorial Award

Kimberly Lynn Ray

The Finney/Akers Award is presented for outstanding ability in obstetrics and gynecology.

Pediatric Recognition Award

Heather Marie Taylor

This award is presented for excellent performance in pediatrics.

Peter Bryce Award in Psychiatry

John Allen Pybass

This award recognizes the highest performance in psychiatry.

William R. Shamblin Surgery Award

Kimberly Lynn Ray

This award is presented for excellent performance in surgery.

Neurology Award

Marina Lynn Thompson

This award is presented for excellence in neurology.

PRESCRIPTION PAD *Medical Malpractice*

By J. Noble Anderson Jr., M.D. (1989)

J. Noble Anderson, Jr., M.D., FACS
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The issue of spiraling medical malpractice insurance rates exploded on the national stage last year in a way that finally captured the public's attention. According to a recent nationwide poll conducted by the American Medical Association, fully 72 percent of Americans want Congress to pass a law that limits non-economic damages in medical liability cases.

The effects of America's liability crisis have spread beyond practicing physicians to medical students. Another recent AMA survey has shown liability as a top concern for students; half of the respondents indicated that the current medical-liability environment was a factor in their decision about the state in which they would like to complete residency training or in their decision whether to enter a high-risk specialty.

Frivolous lawsuits also begin a financial chain reaction that extends far beyond insurers, doctors, and patients. Doctors frequently order more tests as "defensive medicine" to protect themselves from lawsuits. This translates into higher insurance premiums and in many companies asking employees to

cover more of the costs themselves. The current system places increased financial burdens on physicians' practices, which in turn forces doctors into the precarious position of letting financial considerations affect access to patient care.

Comprehensive medical liability reform is the AMA's top legislative priority; it presently considers 24 states to be in crisis situations. In this year's elections, candidates for president, Congress, and state legislatures across the nation will have to address medical-legal reform, making it a key campaign issue.

President Bush has stated that unfinished business remains in regards to medical liability reform. A reform proposal passed the House last year (the HEALTH Act), but was stalled in the Senate. Now the AMA is strongly advocating that the Senate reconsider similar legislation. For the benefit of our patients and the future of medicine, it is hoped that the present liability crisis will improve and lessen its effect on the health-care delivery system.

Alumni, Let Us Hear From You

Please take a few minutes to share with us any personal or professional news for publication in a future issue of the *Alabama Medical Alumni Bulletin*.

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.)

Please return this form to: Elaine Chambless - Director of Alumni Affairs

The University of Alabama Medical Alumni Association - MAB • 811 20th Street South • 1530 3RD AVE S • BIRMINGHAM AL 35294-2140

THE CADUCEUS CLUB *Travel Fellowship Report*

GENERAL SURGERY AT HOSPITAL PABLO ARTURO SUÁREZ, QUITO, ECUADOR

By Tara Loux

As a high-school student, I developed an inexplicable passion for the Spanish language. In college, I majored in Spanish language and literature, even though I knew I wanted to apply to medical school. After I graduated from college in 1999, I realized that, even with nine years of study, my speaking proficiency was poor at best. It was then that I decided to take a year off before medical school and live in a Spanish-speaking country. After much research, I decided on a program of service and learning in Quito, Ecuador.

I took classes at a local university, worked 20 hours a week in a home for people with terminal illnesses, and taught some English as well. I also became fluent in conversational Spanish—and met my future husband. We speak Spanish in our home, and I am just as comfortable in that language as I am in English. We are now married and plan to return to Ecuador when we are able.

EMERGENCY MEDICINE

Between my first and second years of medical school, with the gracious help of the Caduceus Club and the Medical Student Enrichment Program, I returned to Ecuador for a summer internship in the emergency room of a small, very poor public hospital in Quito, the country's capital. Hospital Pablo Arturo Suárez was a sanatorium in the late 1940s, during which time it was on the outskirts of the city. But Quito grew up around it, and it now provides a range of services to residents, as well as to the many small, poor towns north of Quito.

The hospital has 32 inpatient surgical beds, four operating rooms, about 50 inpatient medical beds, a full-service obstetrics and gynecology center, a newborn nursery, a fully staffed emergency room, outpatient clinics, a limited-service laboratory, a radiology department that provides plain films and ultrasound, a pharmacy, and a physical rehabilitation center. It is staffed with both medical and surgical specialists, including urology, neurosurgery, cardiology, intensive-care medicine, nephrology, and pulmonology. There are also many accessory workers, including social workers, physical therapists, and respiratory therapists.

During that summer I got a firm grasp on the general medical language and phraseology that I had been lacking, and I learned the basics of how medical professionals communicate with one another in Ecuador. Even with that experience, however, I still stumbled over large, bulky words like *hiperplasia linfoide* and *apendisectomía*. I feel that effective communication is important in gaining the respect and trust of both patients and colleagues, and I decided to return to Ecuador to fine-tune my medical Spanish such that I can be a respectable working professional in that world. Because I am a student, however, my return trip to Ecuador depended once more on the generosity of the members of the Caduceus Club.

GENERAL SURGERY

On this most recent trip, I spent all of December in Quito at the same hospital. This time I worked five to six days a week on the general surgery floor with one of the surgical teams, which was led by the hospital's chief of surgery, Hugo Renterría, M.D.

Many things struck me about the experience. First and foremost, the monetary resources of the hospital are extremely limited, so the staff reuses almost everything they can. There are no disposable drapes, towels, or gowns in the operating room. Everything is washed and re-sterilized—not for the sake of saving the environment, of course, but rather because manual labor in Ecuador is much more inexpensive than in this country. All of the equipment that they have is older, sometimes secondhand. In the operating room in which our team worked there was only one working overhead light.

The best way to describe the mentality of surgeons (and physicians in general) in Ecuador is to recall the mentality of the medical field in America about 20 years ago.

Although the Ecuadoreans do the best they can with the resources they have, the niceties of current medical care are definitely lacking. For instance, the surgeons show very little sensitivity toward their patients. They are rude to the family members, whom they send from the wards during rounds, saying, "Please, a little privacy!" They then proceed to discuss the patients' cases loudly and inconsiderately in language that is difficult for the patients to understand. They uncover them and leave them unnecessarily naked, with no concern for their privacy, as the ward is completely open. In Ecuador, especially in the most indigent populations (like those people who do not have a telephone or even know how old they are), poverty leaves little room for dignity.

Still, despite the lack of sensitivity, patients who come to this hospital do receive adequate care, even though resources are sorely stretched. The economic situation in which the hospital finds itself is such that it cannot stock medicines, syringes, or other important supplies. Doctors must write prescriptions for these items, then have the patient's family members buy them at a local pharmacy. Many of the patients in the hospital could not afford the expensive antibiotics or other drugs that they needed, and doctors were forced to substitute drugs that were less expensive and less appropriate.

In this sort of situation, doctors must constantly think about the effects of their medical decision-making on the financial situation of the patient. They must rely heavily on the most inexpensive tools that they have: the history and physical exam. They



Top: The emergency department at Pablo Arturo Suárez. Center: Ecuadorean surgery interns. Bottom: The open surgical wards.

look for every possible clue they can find on the history and physical, and they only order the most necessary laboratory or radiographic tests.

Ecuador is a poor country, and medical malpractice law is not an area that has developed as yet, as there is no malpractice insurance and certainly no Ecuadorean doctor can pay a hefty jury penalty out of pocket. Attending doctors in Ecuador may earn US\$300 per month, hardly enough on which to support oneself, much less raise a family. A 24-hour moonlight shift may earn US\$25. Many doctors are forced to work multiple jobs, even outside of the medical field. There are doctors who drive taxis at night to make ends meet.

People who want to make money certainly do not go into medicine in Ecuador. The country's doctors, therefore, are dedicated professionals who care about their patients and work with very limited resources while trying to ensure the best outcome possible. They haggle every day with social workers and hospital administrators, fighting what seems to be an endless battle against more abject poverty than America has ever seen. We should never cease to be grateful for the opportunities available to both doctors and patients in this great country.

When I Was in School...

Remembering the Classes of 1950, 1955, and 1980 By Matt Windsor

Every class of medical students has its own personality, formed by the historical events of the time, shaped by its unique characters, and refined by training, teachers, and school. As the classes of 1950, 1955, and 1980 look forward to their reunions on February 18-19, three alumni cast a backward glance.

Note:
Also having reunions on February 18-19 are the classes of 1960, 1965, 1970, 1975, 1985, 1990, and 1995.



Doris Phillips (center, right) says many of her classmates were just out of the service when this freshman picture was taken in 1946.

DORIS PHILLIPS, M.D. Class of 1950

SEMI-RETIRED PEDIATRIC ALLERGIST, BIRMINGHAM

What Word Best Describes Your Class? Driven.

Why? Most of our class had been in World War II. They were veterans, and the average age was 35. A lot of them had to go back to school to get into medical school. Many of the older members went into family practice so they would have more years to practice. They studied, and they were serious about it.

On the Other Hand: In our first year, the older ones were a little upset about the regimentation. Every once in a while, they'd say, "It's time to call Uncle Lyndon." One of the members of our class was related to Lyndon Johnson. They would get him on the phone, and I don't know what he told them—probably to persevere. They called him a lot.



Stephen Rowe's 1955 class was the school's largest—and the first to use the new Basic Sciences Building.

STEPHEN ROWE, M.D. Class of 1955

RETIRED FAMILY-PRACTICE PHYSICIAN, GADSDEN

What Word Best Describes Your Class? Relieved.

Why? We started in 1951, at the height of the Korean War. Our class was half and half veterans and non-veterans. We were all waiting to get into medical school, and we got in, and we persevered. We lost only one person—in our freshman year—and that was for a medical reason. Then we gained another, so we started with 80 and ended with 80. Ours was the first class to be in the new Basic Sciences Building, which is now the dental school.

Waiting Game: The building wasn't finished, so we didn't start until the first of October. We had kind of an accelerated first two or three months through anatomy and biochemistry, but we got through it. We ended up with a bunch of professors and chiefs of service out of our class.



Theodis Buggs (left, and right with S. Richardson Hill), says he treasures the friendships he made in medical school.

THEODIS BUGGS JR., M.D. Class of 1980

ORTHOPEDIC SURGEON, BIRMINGHAM

What Word Best Describes Your Class? Sharing.

Why? There are a lot of hard times in medical school, a lot of studying—especially at first, when you're making the transition from college. But that shock is lessened by your classmates. I still have friendships today that I developed then, just because of the close bonding that occurs. Our class had a lot of camaraderie.

Getting Real: I think the first clinical experience is always one that sticks out. Especially for me—my first one was pediatrics, in the high-risk nursery. And going from book learning to actually treating patients, touching patients—that's really stuck with me, and it sticks in the minds of most medical students.

From the Archives: *The Changing Face of Medical Technology*

By Tim L. Pennycuff • Photos Courtesy of UAB Archives

“Many medical procedures that would have been thought impossible just a few years ago are already being carried out at University Hospital.” While these words could easily have been spoken at the recent opening of the new University Hospital, the statement was actually made in 1983 by hospital administrator James E. Moon.

In the summer issue of the hospital’s *Beacon*, Moon said, “High-tech procedures are creating precise, accurate routes to diagnosis and treatment. The money and human trauma saved are often enormous.” He also noted that “new body-imaging techniques using computers and physical forces such as magnetism read the human body without the insertion of tubes and dye.”

The cover story in this issue of the *Alabama Medical Alumni Bulletin* describes some of the best in medical technology now located in University Hospital, and Moon’s comments remain as true today as they were 21 years ago. The photographs shown in this “From the Archives” feature, however, clearly illustrate a problem encountered in hospitals and health-care institutions worldwide: that which is high-tech today is out-of-date tomorrow.

CLOCKWISE FROM TOP:

- Robert E. Roth, M.D., radiologist in chief, with the hospital’s new Cesium 137 Teletherapy Unit, 1963. The unit cost more than \$16,000 and was installed in the basement of the hospital.
- The hospital’s new Intensive Care Unit, 1966.
- John Boname, M.D., observes Sandra Rutherford, a student in the hospital’s certificate-based anesthesia program, 1964.
- University Hospital’s emergency department, 1984. Shown at work are (left to right): Melissa Kerzic, R.N.; Frederic Ransom, M.D.; Michael Brooks, M.D.; Annalee Smith, R.N.; and Donna Harrell, R.N.
- The newly renovated kidney-dialysis treatment room, located on the third floor of the New Hillman Building, 1960s.
- John W. Kirklín, M.D., in surgery, circa 1982.





UASOM ANNUAL FUND

“After studying diligently for pathology, pharmacology, microbiology, and Step One of the boards, we finally stepped out of Volker Hall and into the hospital with enthusiasm and determination to make a difference. Slowly, we built confidence as we combined the information we learned during our first two years with the practice of medicine. We were able to deliver babies, and watch as children took their first breaths and celebrate with the new parents. In tough times, we held hands with patients who were diagnosed with cancer or other diseases. We also watched as some patients lost the battle and took their final breath, and we cried when we were alone.

The third year of medical school gave us a chance to experience the reason we chose medicine as a career. We began to recognize our strengths and weaknesses and slowly learn to accept both.”

MANISHA SHARMA

MS-IV Class of 2005 President

Every dollar you give to the University of Alabama School of Medicine Annual Fund helps the school educate the next generation of physicians. Make an investment that will last for generations.

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