My most enjoyable task as dean is meeting with students, discovering how they arrived at the decision to enter medicine at Wright State and observing their progress through a rigorous four-year program. I think you, too, will enjoy meeting the class presidents of Classes 2002–2005.

Classes progress through a redesigned curriculum structured around organ systems. This new curriculum better integrates the basic and clinical sciences in the first two years and incorporates simulated patients and online testing. Readers who are physicians may find the education article particularly relevant.

In the area of service, the School of Medicine is among the partners examining the readiness of our community to deal with mass destruction from natural causes or from terrorism. Local and regional groups are formed, and many of our faculty and alumni are involved in disaster planning and response. Two of our local alumni arrived at Ground Zero on September 12, 2001, serving as the medical team managers for Ohio Task Force One, a part of the Federal Emergency Management System.

A recent collaboration for cancer prevention and control holds great promise for the health of our community and is highlighted in the research article.

The School of Medicine continually seeks excellence in its missions of teaching, research, and service, and we are pleased to share these few outstanding examples with you.

Sincerely,

Howard M. Part, M.D.
Dean
For first-year student B. J. Missick the dream is one step closer. “I always pictured myself on Wall Street, working hard, wearing a different suit every day.” But, through the examples of Drs. Alonzo Patterson and Gary LeRoy (’88), the mentorship of the late Wright State President Harley Flack, and the strength and inspiration of my mother, his interest changed to medicine. His goal now is to become a “caring, compassionate, knowledgeable, and down-to-earth physician.”

“For a first-year student, the volume of knowledge to be learned is incredible! You must live, speak, and breathe medicine,” B. J. says. “Learning takes over your life and forces you to become regimented in planning your days and lifestyle so that you don’t lose ‘who you are’ in the midst of it.” Instead of scheduling time to study as he did as an undergrad, B. J. has to schedule time to e-mail or call his family. First-year medical students normally spend between five and eight hours a day in scheduled classroom lectures, labs, workshops, or study groups. On Fridays, students participate in the “Introduction to Clinical Medicine” course, and on top of that is personal study time.

Keeping motivated is as individual as each student. “Inspiration in its purest form, for me,” says B. J., “has been working alongside the doctors and volunteers during the Reach Out program here in Dayton, playing with children during a sickle-cell anemia retreat where I volunteered, and witnessing the utter joy on the faces of a couple after they were told they would be having a baby.”

“Wright State,” B. J. notes, “has far exceeded my expectations as a place for learning the art of medicine.”
Encouraged by family and friends, Sarah McElwee confirmed her desire to enter the field of medicine while working on the thoracic unit at the James Cancer Hospital in Columbus. As a nursing assistant, she observed doctors who worked closely with other members of a team to help their patients. That experience encouraged her to move into the medical field. Now, Sarah says she is finding that “studying medicine will be a lifelong journey.”

As a second-year student, Sarah spends around five hours a day in labs, lectures, and workshops and another five hours studying outside of class—unless she has a test, and then it’s almost twice that amount. She says, “Medical school is a huge life-change. It is different from undergraduate college life. In studying medicine the demand is just always present. Even if you tell yourself you are taking a break, medicine is there. You think, ‘I have this lecture that I need to review or this test that I need to study for.’”

Sarah spent the past summer doing an obstetrics/gynecology/radiology elective through Madigan Army Hospital in Tacoma, Washington. While there, she also volunteered at a free health clinic based in downtown Tacoma, where, working out of a small, double-wide mobile home, family medicine doctors treated different ethnic groups. Her experiences in that environment gave her renewed respect for family medicine doctors and their commitment to treat the whole person. Her days spent at the clinic encouraged Sarah to add “learn a foreign language” to her list of things to do. “I saw first-hand the problems a language barrier can cause between patients and their doctors and how the most simple instruction could be totally misunderstood.”

At Wright State, Sarah says her favorite class so far, because of its clinical significance, has been the neuroanatomy course. “It is excellent!” Sarah says, “Dr. Jane Scott made the transition to medical school easier. It was my privilege to present her the professor of the year award on behalf of my class.”

With her goal of becoming a physician a few steps closer, Sarah says, “I think what I am learning now is something where I can make a difference in my day-to-day interactions with people. It’s something that has lifetime value.”

Year II President Sarah McElwee with an active participant of the Student-to-Student presentation, Kids ’n Docs.
Now in the long-awaited clinical stage of his journey toward becoming a doctor, Jerry Ahluwalia is greatly enjoying this phase of his medical school training. With a B.S. in biology from Georgetown University and three years of graduate work toward a Ph.D. in pharmacology, Jerry says of his third year of medical school, “Being with patients all the time is really amazing.”

The decision to pursue becoming a physician began during his junior year in high school. “I’ve always been attracted to the sciences,” Jerry says. Debating between the field of architecture or medicine for his career, he chose medicine because, “Going into medicine would allow me to help people and hopefully make a difference in their lives.” He now considers medicine not just a profession that he decided on, but one he knows is part of his “calling” in life.

Jerry appreciates his acceptance at Wright State. “The admissions committee looked at the whole person,” Jerry states. “During my undergraduate years I tried to concentrate on being well rounded, which I hope will help me relate to patients in the future. That’s why I went on to graduate school—to show that I was capable of doing well in advanced science and to get some research experience.”

Third year consists of required rotations that acclimate students to different aspects and specialties of medicine and help them prepare for Step II of the United States Medical Licensure Examination (USMLE) test. “One of the most difficult aspects of the third year is that one must take on all of the responsibilities of a full day in the hospital or clinic, and still come home in the evening and try to master information on an entire field of medicine,” says Jerry. Learning to “round” alongside residents and present information to fellow students, interns, residents, and doctors is “all part of the process. You are on your feet, going all the time,” Jerry states. “You expend your energy. You get home, maybe have dinner, study, prepare information for the next day, make some calls, and fall asleep.”

Inspiration to Jerry has been the daily “little things” that remind him of the difference he can make. “You are tired, hungry, and then something wonderfully unexpected happens, like getting a big surprise hug and smile instead of a handshake from a small six-year-old patient,” Jerry states. “I love medicine and find it very fulfilling, even with all its commitments, rigors, and responsibilities.”
For fourth-year medical student Monica McHenry, her love of science and the dream to become a doctor began as a young girl. Following her father, an infectious disease specialist, during his early morning rounds on Saturdays, she saw the difference he made in people’s lives, and was inspired. “He is the greatest example of a humanitarian that I know,” Monica says. He taught her and her siblings that whatever they decided to do in life, they should have love and respect for humanity.

With a bachelor’s degree in English, she taught high school for a year. Although worthwhile, she realized that if she did not pursue her childhood dream of being a doctor, she would feel like she had somehow failed. She decided she would not let insecurity, fear of not being disciplined enough, or lack of confidence hinder her.

One of ten children, Monica says vying with her brothers drove her to run faster and jump higher than they could. This competitive spirit has motivated her through many activities, including the rigors of medical school.

From the first day of medical school, she has seen growth and maturity in her confidence, happiness, self-esteem, and thought processes, which “makes me a better learner, friend, wife, and just a better person in general,” says Monica.

“You learn so much information in your first and second years. And then in the third year, all of what you learn begins to make sense and fall into place. In your rotations, you want to do everything right. You don’t want to make a mistake, so each and every rotation is a tremendous learning experience,” she says. Now in her fourth year, Monica realizes that she is through the basics, more confident, and able to use more of her personality and style when dealing with patients and peers.

“I have a passion for medicine, and through the rigors of it, I know that I also have a passion for life and family. I love what I am doing. I have the gift of being able to make people smile. Though there are those moments of being exhausted and cranky, there are moments like today. While I was on rounds I visited a young 16-year-old girl. She has a history of STDs and therefore is faced with never having children. I was going through my routine, yet I noticed she was withdrawn and unhappy, and then she started to cry. I sat down with her and we talked. I know the time I spent with her was important, to her and to me. And later, she smiled. It was a gift,” states Monica.

Monica says, “Wright State has been an awesome, nurturing place for me. I’ve had many great opportunities, have made many friends, had a large amount of personal growth here and I find the aspect of moving on bittersweet.”

—Nancy Harker

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**Year IV: “A Passion for Medicine”**

“Wright State has been an awesome, nurturing place for me.”

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Year IV President Monica McHenry explains the biceps to a young boy at a volunteer activity.
Dayton area law enforcement agencies, firefighters, emergency management agencies, and hospitals participated in a mock chemical terrorism attack last summer. The Department of Emergency Medicine plays an active role in the region’s preparations for terrorism and natural disasters. (Photo courtesy of Dayton Fire Department.)
James E. Brown, M.D., assistant professor of emergency medicine, has been teaching health care professionals about weapons of mass destruction for many years. A paramedic with the Louisville Fire Department in Kentucky for a decade before entering medical school in 1987, he has been interested in developing systems for coping with disasters for most of his adult life. Since September 11, 2001, he’s seen concern about the subject increase exponentially.

“Decontamination systems were set up in a parking lot during last summer’s preparedness drill. (Photo courtesy of Dayton Fire Department.)

service announcements about anthrax and plans to issue fact sheets on other concerns related to bioterrorism if the need arises.

“Our emergency response systems—911, police, fire, and emergency departments—have received hundreds of calls and visits from citizens who were concerned they might have been exposed to anthrax,” says Glenn Hamilton, M.D., professor and chair of emergency medicine. “We want the public to remain alert and aware, but not unduly fearful.”

Specific anthrax information for physicians is being developed, he says. The Department of Emergency Medicine is also developing continuing medical education courses for area physicians. It held a symposium in late December with the goal “to prepare physicians to evaluate and treat patients exposed to nuclear, biologic, or chemical agents in a mass casualty scenario.”

Mark Gebhart, M.D., assistant professor of emergency medicine and president of the Greater Miami Valley EMS Council, says anthrax hoaxes have adversely affected many more people than the actual
disease. As medical director of the Kettering Fire Department, he responded to a situation in which “a disgruntled employee poured Comet cleanser on the floor.” The reactions from some coworkers afraid of anthrax caused the only real havoc there, he says.

Dr. Gebhart was a paramedic with the Kettering Fire Department before entering Wright State University School of Medicine in 1993, and his interest in preparation for disaster has been long term. Now a deputy fire chief for Kettering, he says he’s far more concerned about other biological agents than he is about anthrax.

“One case of small pox would become an epidemic,” he says. Small pox is highly contagious, untreatable, and fatal about 30 percent of the time. Those preparing for bioterror have wrestled with difficult issues like when and how to quarantine people in cases involving biologic agents like small pox. The most likely bioweapon is probably the plague, according to Drs. Gebhart and Brown.

Drs. Brown, Gebhart, and others from emergency medicine participated in a Weapons of Mass Destruction Terrorism exercise conducted in August 2001. As one of 126 cities selected by the Defense Department for such training, Dayton brought together personnel from area fire departments, law enforcement agencies, hospitals, and emergency management agencies for the event.

“We set up a large scale, simulated chemical attack at a basketball game at the University of Dayton arena,” explains Dr. Brown, who says most experts at the time thought chemical weapons were more likely than biological weapons. “They put ads in the paper asking for people to be casualties, and about 150 people volunteered. We set up decontamination systems and transported ‘victims’ to the hospitals. Several hospitals in the area used the event as a disaster drill.”

The exercise helped identify strengths and weaknesses in the community’s preparedness, Dr. Brown says. “We figured out that it’s very important that a physician be one of the first on the scene of a terrorist incident.” Physicians are needed to quickly identify possible toxic agents and coordinate medical treatment for victims.

“We’re setting up a physician response unit with some faculty from emergency medicine who could respond to a major disaster.” Among those involved in the discussions is Randy Marriott, M.D. (’91), a clinical assistant professor of emergency medicine and Dayton Fire Department medical director. He and medical school classmate Timothy Manuel, M.D., are members of a federal Urban Search and Rescue Team that responded to the terrorist attacks in New York.

“Our community is as ready for a terrorist attack as anybody can be,” Dr. Brown notes. “We’ve made great strides and we’re certainly much better off than we were before September 11. But how can you ever really be ready for something like what happened that day?”

—Robin Suits
W hile the country watched in disbelief as planes careened into the World Trade Center and the Pentagon on September 11, two alumni started packing. Classmates from’91, Randy Marriott, M.D., and Tim Manuel, M.D., are part of the Federal Emergency Management System (FEMA) of 28 task forces across the country. Ohio Task Force One of the Urban Search and Rescue Response System (USRRS) received its call to action less than an hour after the second World Trade Center tower collapsed.

The task force is composed of specially trained personnel with a wide range of expertise—structural engineers, paramedics, firefighters, medical personnel, and canine units. This is Ohio’s only task force, and there are only four FEMA task forces in the Midwest.

“Becoming part of the USRRS is difficult,” explains Dr. Marriott, medical team manager of Ohio Task Force One. “You have to be able to document the skill and expertise level of each member of your team and you need highly specialized equipment. The unit must demonstrate the ability to be completely self-sufficient for 72 hours and be able to respond instantly.” Ohio Task Force One was selected as a USRRS team in 1998, beating out competition from approximately 35 other teams across the country.

Another FEMA requirement is that two physicians with specialized training must be on the team, the role that Drs. Marriott and Manuel hold. Both are clinical assistant professors in emergency medicine and each is the medical director of a local fire department, Dayton and Bellbrook respectively. Both were EMS personnel before they entered Wright State’s medical school and
played active roles in the formation of organized search and rescue operations for the city, state, and nation.

“Ohio Task Force One began,” explains Dr. Manuel, assistant medical team manager, “as a local effort to provide the expertise and equipment for specialized operations to assist local fire departments.” That way, a fire department could economically train just one individual to meet the needs of this specialized team, called the Miami Valley Urban Search and Rescue Task Force. That approach worked well for a regional model too. “Our USRRS task force has personnel from 50 fire departments across Ohio, rather than from one large city fire department like Los Angeles or Phoenix. We also looked at who would be best for the job, rather than at seniority or who has the highest rank. It is unique.”

Ohio Task Force One was first deployed at the tornado in Xenia in September 2000. New York City was its first national call. For trips over 1,000 miles, the task force would normally deploy in a C-141, leaving from Wright-Patterson Air Force Base. The collaboration with an Air Force base is unique among FEMA’s task forces, but because of the nature of this disaster, military transports were grounded. So, the task force left by bus, arriving in Manhattan at dawn. “It was one of those gut check things,” says Dr. Manuel about their first glimpse of the billowing smoke and altered landscape from the New Jersey side.

For their New York colleagues, this was the first time in the city’s history that outside assistance had been requested. Because the attack occurred during a shift change for the city’s specialized personnel, two-thirds of their technical people were lost. “The firefighters from New York were unbelievable, especially considering the scope of their losses,” notes Dr. Marriott. “At first they weren’t sure how to use our assistance and even inquired if we were trained in ‘silo rescues.’ But they soon understood our capabilities and we worked

“We showed what our technical capabilities were and I think we gained a lot of respect. I have no doubt we’ll be called again.”
alongside them in small teams.” The units worked in 12-hour shifts that often extended to 14 hours or more.

“It was worse than anything I could have ever imagined,” says Dr. Manuel. “In our reality check en route, we were looking at the most unsecure, unsafe rescue operation of a lifetime with a potential of 30,000 deaths. We were concerned about losing members of our task force to injury or a secondary attack. Our job is to take care of the team members. We make sure that they are drinking water, that they’re sleeping, that their blisters are taken care of. Our job is to make sure they all come home.”

That extends to the canines of the task force as well. “The dogs are part of the team, and we care for them until we can get them to a vet,” says Dr. Marriott. “Canine member Woody received a bad paw cut, but returned to duty within a day. We also had one dog, who toward the end of our 10-day assignment, would not eat or drink, probably because of depression and stress. It was very difficult on the dogs too. They weren’t finding anyone.”

Ground Zero was a quagmire of burning fires, broken glass, treacherous footing, multi-story drop offs, overhead hazards, operating cranes, and so much twisted metal it was called a “sea of razor blades.” For the humans, part of the stress was “the tape in the back of your head that kept saying, ‘this is stupid, this is stupid, this is stupid,’ but you just had to ignore it and go on,” says Dr. Manuel.

Our expectations were that we would be there, “finding people left and right, extricating them from debris and rubble. That’s not what we found,” says Dr. Marriott. “Instead, we found ourselves standing on one of the largest mass graves in our country’s history.”

“I think Ohio proved itself while we were there,” says Dr. Manuel. “We went in as an unknown resource, never before seen or deployed. People on our team showed themselves to be excellent professionals. We showed what our technical capabilities were and I think we gained a lot of respect. I have no doubt we’ll be called again.” Dr. Marriott agrees, adding, “It was a privilege to serve my country briefly at Ground Zero and an honor to do so with the members of Ohio Task Force One.”

—Judith Engle
New Approach to Cancer Prevention

In a collaborative agreement, Wright State University School of Medicine, Premier Health Partners, and the Hipple Cancer Research Center will work together to prevent cancer. With a new mission and vision and through community collaborations, Hipple Cancer Research Center plans to coordinate screening and early detection programs, implement cancer education programs, and study cancer prevention.

Hans (Johannes) Berkel, M.D., Ph.D., serves as president and CEO of Hipple Cancer Research Center and heads the Division of Cancer Prevention and Control in the Department of Community Health. The collaboration between Wright State and Hipple Cancer Research Center includes participation on its Board of Trustees. Margaret M. Dunn, M.D., associate dean for faculty and clinical affairs, also serves as vice chair of Hipple’s board. “This program has the potential to enhance the health of our community and advance our academic programs,” she says. “We are very excited to be a partner.”

Dr. Berkel’s original attraction to Dayton was the opportunity to make a difference in his area of specialization. “Hipple has a lot of potential,” he says. “Collaborations with the community and health care organizations could make Hipple a national, if not world-class, cancer prevention center. It is nice to be

According to Ohio’s 1998 data, approximately one in five cancers occur in the GI tract, the majority of those in the colorectal area. It is significant to note that while the small intestine comprises the largest surface area in the GI tract, cancers here are so rare, they are not categorized.
Hans Berkel, M.D., Ph.D., is the director of the Division of Cancer Prevention and Control in the Department of Community Health and the President and CEO of Hipple Cancer Research Center.

"Collaborations with the community and health care organizations could make Hipple a national, if not world-class, cancer prevention center."

able to put your own stamp on an organization, to feel that you have turned challenges into great opportunities.

“As an epidemiologist, I am particularly interested in the frequency of tumors throughout the GI tract,” he says. “Oral tumors are not very frequent; esophageal and stomach tumors are very frequent. Then when you get into the small intestine, there are very few malignant tumors, although the small intestine has the largest surface area. After the small intestine is the large intestine, the most frequent site for gastrointestinal tumors in the system. What is preventing tumors from growing in the small intestine? Is it genetic or environmental? If we could get a handle on why that difference is there, we might be able to figure out a way we can intervene earlier in the carcinogenic process.”

The National Cancer Institute research project that Dr. Berkel brought to Dayton is a chemoprevention trial for patients with polyps in the large intestine. Chemoprevention is “the most exciting new development in cancer prevention research,” Dr. Berkel notes. Examples of chemoprevention in every day life are fluoride and iodine. Fluoridated water supplies have greatly reduced dental cavities and gum disease, and iodine added to common table salt has prevented thyroid disease and goiter growth. In the area of cancer, Tamoxifen for breast cancer and Selenium for prostate cancer have been used in chemoprevention clinical trials.

Dr. Berkel’s research project is testing the use of calcium and an NSAID, an aspirin-like drug, as a prevention tool for colon cancer. “Almost 90 percent of colon cancer begins as a benign polyp,” he explains. “Currently the treatment is to endoscopically remove the polyps and monitor their reoccurrence. We know that patients who have had polyps in the colon are at increased risk for developing more polyps and for ultimately developing a colon malignancy. We are studying whether or not our approach will reduce the polyp recurrence rate.”

With a long “to do” list, Dr. Berkel emphasizes the short-term needs: develop key community alliances, recruit talented researchers, and obtain research grants. He also hopes to teach epidemiology to medical students and supervise medical and graduate students in research projects. “I think it is important for our primary care doctors of the future to understand cancer prevention. Students could participate in cancer screening or be involved in our research programs, developing their own theses.”

Although epidemiology will figure prominently in Hipple’s new mission, the science labs at Hipple will remain. “Our future lab research will be particularly focused upon cancer prevention and control,” says Dr. Berkel. “For example, in order to evaluate the effectiveness or ineffectiveness of a drug treatment, we measure intermediate biomarkers, which is lab based.” Two research scientists have recently joined Hipple: Dr. Teresa Hill, who is studying colorectal cancer screening in primary care practices, and Dr. Jianjun Zhang, a nutritional epidemiologist.

Dr. Berkel’s vision, he admits, includes high goals. He hopes, for example, that Hipple will one day receive a specialized cancer center status from the National Cancer Institute. “If you want a nice car, such as a Cadillac, but aim for a Volkswagen, you’ll never get what you really want,” he says.

Dr. Berkel was most recently associate director of cancer prevention and control at the Feist-Weiller Cancer Center at Louisiana State University Medical Center in Shreveport. He has also held positions at the University of Southern California School of Medicine, the University of Alberta, and the University of Calgary.

Of Dayton, Ohio, Dr. Berkel says, “I love it. The people are very friendly and helpful.” Educated in the Netherlands and a world traveler, he has much to compare to. “Canada has too much snow, sometimes even in July, and Louisiana is very hot. Dayton is sort of in the middle and has four seasons. Perfect.”

—Judith Engle
In 1993, a faculty committee, composed of representatives from several departments began a curriculum redesign. The goal was to establish a new curriculum with a structure that would adapt to the changing needs of medical education in the next century. One of the dramatic changes was the development of integrated courses in the first two years, meaning that departments and disciplines would collaborate on what and how material is taught and share in the teaching.

Once a plan was in place, an additional 18 months was devoted to designing the new courses. “Each course was developed by a small group of faculty who were knowledgeable in that area,” says Albert Langley, Ph.D., professor emeritus, former associate dean for academic affairs, and the one most responsible for keeping the wheels for change in motion.

Once a plan was in place, an additional 18 months was devoted to designing the new courses. “Each course was developed by a small group of faculty who were knowledgeable in that area,” says Albert Langley, Ph.D., professor emeritus, former associate dean for academic affairs, and the one most responsible for keeping the wheels for change in motion. Oversight of the curriculum rests with the Faculty Curriculum Committee, which meets monthly and reviews each course, clerkship, and elective.

The new curriculum was launched in 1997 with the incoming Class of 2001. Each year has been implemented a year at a time, and the curriculum has been adjusted and refined throughout the process. “We had to be very flexible,” notes Dr. Langley. “We were learning as we went.”

During Biennium I, medical students develop their foundation in the basic sciences with considerable reference to clinical application. “The hard sciences are being learned in a clinical context,” says Dr. Langley. “We have clinical faculty involved from the first year.”

The basic medical sciences of the more “traditional” first year are covered in Human Structure and Function; Molecular, Cellular, and Tissue Biology; and Principles of Disease. Each course has themes of and examples from clinical medicine, and each course is taught by faculty from many departments. In addition, first-year students take Introduction to Clinical Medicine, Social and Ethical Issues in Medicine, Evidence-Based Medicine, and an elective.

The Introduction to Clinical Medicine course runs each Friday throughout Biennium I, providing clinical contact from the very first week of class and teaching medical students the basics of patient care, such as taking a thorough medical history and conducting a physical exam. To enhance clinical skills, the school uses standardized patients and the Objective Structured Clinical Examinations (OSCE). For these learning and assessment tools, individuals are recruited and trained to act as “real” patients, presenting realistic histories, symptoms, and responses to inquiries. After examinations, the simulated patients provide constructive feedback to the medical students about their interpersonal and technical skills.

In Year II, medical students take Pathobiology and Therapeutics; Neuroscience; Musculoskeletal and Integument; Blood; Cardiovascular; Respiratory; Renal; Endocrine and Reproduction; and Gastrointestinal systems, as well as two electives. “The second year uses an integrated organ systems approach,” says Dr. Langley.

Electives in the first and second years of the curriculum are key features. “The first biennium elective is very unique,” says Dr. Langley. “We require the students to participate in three two-week electives. They get to
see what doctors really do at a time when most of their learning is in a classroom.” The electives are designed to immerse the students in a single experience relevant to their development as a physician. “By the end of the second year, they are ready to move into their clinical clerkships with the necessary knowledge, skills, and attitudes to succeed,” he says.

In Biennium II, students take nine clerkships plus a junior internship elective from one of the primary care departments and five month-long electives. Year III begins in August and lasts 12 months with three weeks of vacation during the year. Over a 12-month period, students have clerkships in Family Medicine, Internal Medicine, Women’s Health, Pediatrics, Psychiatry, and Surgery.

Year IV begins in August and lasts 10 months. During that time, the students have clerkships in Emergency Medicine, Neurology, and the Surgical Subspecialties. In addition, students complete 20 weeks of electives including a primary care junior internship, allowing them to choose areas in clinical or basic science of special interest. Two months of the final year are allowed for interviewing at residency programs and a much-needed vacation.

“We, the faculty, need to keep in mind that our curriculum today, however polished we feel it is, needs frequent change and adjustment to match the community’s and society’s increasing expectations for physicians.”

With the restructuring of the curriculum, faculty involvement has increased. “This curriculum has resulted in an increased demand on faculty time, but they have responded tremendously,” notes Dr. Langley, who explained that one of the school’s most unique features is the “broad commitment of faculty in spite of very busy schedules. Everyone is really committed to education; that’s not the usual priority of many faculty at other medical schools.”

The new curriculum has also increased the use of technology to achieve its academic goals. “We now require all students entering medical school to purchase a computer,” noted Dr. Langley. With the help of the Interdisciplinary Teaching Laboratories (IDTL), the school provides a variety of educational resources, including labs, supplies, and equipment.

Last year, IDTL initiated computer-based testing for second-year medical students’ comprehensive examinations. “The students really liked testing online,” says Debra Hendershot, director of IDTL. “They were all quite comfortable and
preferred online testing.” Medical students gain valuable experience in this form of testing, which is patterned after the licensing exams. Computerized testing also allows for faster turnaround and better statistical analysis.

“There are a number of courses where technology is essential,” says Dr. Langley. For example, the Department of Anatomy has developed interactive computer programs employing virtual reality (VR).

“Yorick: The VR Skull” teaches human skull osteology using a QuickTime™ VR interface. This user-friendly program allows students to rotate their view of the bones of the skull along horizontal and vertical axes, and provides labels and descriptions of each structure.

Similarly, other software enhances the teaching of microanatomy and neuroscience.

The new curriculum has affected how medical students process new skills and knowledge. “One of the changes has been an emphasis on competency,” says Dr. Langley. “Having the knowledge is essential, but being able to apply it is critical to the practice of medicine.” In the first two years, there are now fewer hours of lecture and more hours in small group projects, discussions, and demonstrations where problem-solving approaches are developed.

What lies ahead? Since medicine is changing so rapidly—the Human Genome Project, information technology, the shifting sands of health care delivery, and a resurgence of interest in public health since September 11—how will Wright State’s medical curriculum stay current?

The new associate dean for academic affairs, Dean Parmelee, M.D., feels that faculty bear the greatest responsibility for making continuous improvements in the curriculum and establishing it as a leader in medical education. “The content, that is, what we teach, is probably the easiest to keep current. All of us read journals, attend national meetings, and thrive on learning what is new in medicine. We enthusiastically bring back to the classroom what we learn.

“The format, or how we teach, needs our constant creativity,” says Dr. Parmelee, professor of psychiatry and pediatrics. “Ideally, each faculty member should experiment with new ways to teach every year and never be satisfied, even when the ‘ratings’ are high.

“The assessment, or how we evaluate student learning, may be the hardest and requires the greatest vigilance. The questions we ask, whether on exams, in small groups, or on attending rounds, are more important than the material we present in lecture because they stimulate thinking and enlist active learning. Medical students must be challenged intellectually and not just immersed in the need to memorize. Future physicians will need to be knowledgeable, have a passion for learning, and be prepared to solve problems creatively.”

Dr. Parmelee will continue the process of curricular change. For Biennium I, he would like to see expanded use of small group learning and computer-interactive modules. The integration of pathology and pharmacology in the second-year courses will be enhanced with more laboratory sessions and active-learning modules.

For Biennium II, he wants students to learn more of the basic science of clinical medicine, stay current in the medical literature, and ask questions of the faculty—constantly. Further, he feels fourth-year students need more opportunities to explore basic medical science questions in laboratories as they prepare to become physicians of the 21st century, and they need mentored experiences in teaching their junior medical student colleagues. “We, the faculty, need to keep in mind that our curriculum today, however polished we feel it is, needs frequent adaptation to match the community’s and society’s increasing expectations for physicians.”

—Robert Boley
Irene Duhart Long, M.D., was just a child when she mapped the course of her life. It was the early '60s, she remembers, and she was watching a television program about aviation and space medicine. Colonel John Paul Stapp, an Air Force physician specializing in aviation medicine, was demonstrating experiments for America’s upcoming space program. “It was so fascinating that I knew that a career related to this area would combine my interest in medicine and space and would be a dream come true,” says Dr. Long, a graduate of Wright State’s Aerospace Medicine Program.

Dr. Long was recently named the chief medical officer and associate director of spaceport services at Kennedy Space Center. She has been involved in the launch and recovery of Space Shuttle missions since 1982. She oversees occupational health, institutional safety, and environmental health for the entire Kennedy Space Center. Dr. Long is the first female chief medical officer and the first woman minority to advance to the equivalent military rank of general at Kennedy Space Center.

A native of Cleveland, Dr. Long received her B.A. from Northwestern University in Evanston, Illinois, and her M.D. from the St. Louis University School of Medicine. She completed a two-year surgery residency at the Cleveland Clinic and the Mount Sinai Hospital and a three-year residency and a Master of Science in aerospace medicine here. She is currently a clinical assistant professor of community health for the school.

Dr. Long remains in touch with the friends she made as a resident almost two decades ago. Dr. Stanley Mohler, director of the program, is one. “Dr. Mohler introduced me to Dr. Stapp almost 30 years after his work and image inspired me to choose this career,” she says. “I value the people that I had the opportunity to meet through his guidance.” Dr. Mohler remembers that Dr. Long “was an outstanding graduate student and resident and is now an outstanding mentor. She always demonstrated the highest degree of professionalism.”

Aware that she is a role model for women and minorities, Dr. Long has worked with many students over the years and regards that interaction as one of the most satisfying in her career. She established the Space Life Sciences Training Program, designed to increase the number of women and minorities in science and related fields. “So many of the students I’ve met,” she says, “have stars in their eyes like the little girl from Cleveland, Ohio, who wanted to be a space doctor. Hopefully, I have followed in Dr. Stapp’s footsteps and have passed his inspiration on to them.”

Long received the Women in Aerospace Outstanding Achievement Award in 1998 and the Presidential Award in 1995 from the Society of NASA Flight Surgeons, and she served as that society’s president in 1999. A past recipient of the NASA Exceptional Service Medal, she was one of 18 women recently inducted into the Ohio Women’s Hall of Fame by Governor Bob Taft.

—Judith Engle
Pruett Recognition Ceremony

On Sunday, October 28, School of Medicine students and friends attended the 2001 Thelma Pruett Recognition Ceremony. Held in the elegant Gothic Cloister of the Dayton Art Institute, the event featured a reception followed by the presentation of class-based and donor-based scholarships. The ceremony is named in honor of Thelma Fordham Pruett, who was one of the school’s strongest supporters.

Alumni Baseball Outings

On Saturday, August 18, area alumni and friends visited Fifth Third Field for the first baseball outing sponsored by the Medical Alumni Association. On Thursday, August 30, a second baseball outing was held at Jacobs Field in Cleveland.

A special thanks to all alumni who attended these events. We appreciate your support, and are currently working to plan more outings for Wright State medical alumni and families. If you have any suggestions, call the Office of Advancement at (937) 775-2972.

Annual Fund 2002

This year’s Annual Fund is now under way. The School of Medicine is reaching out to our alumni and friends to provide the crucial support that makes the school such a vital part of our community. Your generous gifts will help fund scholarships, technology and faculty support.

For your convenience, you may now make a gift online at www.med.wright.edu/giving/. This site also has links to more information about giving options and to a special site allowing you to find out if you or your spouse’s employer has a matching gift program.

Save the Date!

Celebrating the Classes of ’82, ’87, ’92 and ’97
October 4–5, 2002

School of Medicine Night at Fifth Third Field
Sunday, August 11, 2002
Dayton Dragons vs. Michigan Battle Cats
Game starts at 2:00 p.m.
Join us at noon for a pre-game picnic at the stadium.
Call (937) 775-2972 for more information.
On October 5–6, the Classes of ’81, ’86, ’91, and ’96, returned to their alma mater for a weekend of fun and fellowship. More pictures and information are available online at the SOM Alumni Web Site at: www.med.wright.edu/alumni/.

Captions:

1) Jeffrey Wigand, Ph.D., presented a CME entitled, “Halting Addiction: Smoking and Health.”
2) Drs. Chris Sessler, Michelle Dayton, and Lois Krousgrill at the 1996 Class Reception.
3) Dr. Patricia Rosenstein (’91) with her husband Andrew modeling the Reunion Weekend 2001 t-shirt.
4) Dr. Elaina L. Lee (’91), with daughter Lauren at the Alumni Picnic.
5) Mark Myton and Dr. Alexis Myton (’91) enjoyed catching up with old friends at the Reunion Dinner.
7) Susan and Dr. Michael Pole (’91) and David and Dr. Irene Druzina (’91).
8) Solene and Dr. Dan Malkamaki, Marsha and Dr. Geoffrey C. Cly, and Dr. Amy M. Carter with husband Andy at the 1996 Class Reception.
9) Dr. Nancy Toy (’91) with Sophie at the Alumni Picnic.
10) Chuck Gastineau from the Boonshoft Museum of Discovery discussed the creation of slime at the CME for Kids.
11) Bring out the clowns! LuLu Bell and Zilcho the Clown made balloon animals for kids at the Alumni Picnic.
12) Mrs. Patricia Powell and Dr. Diane Foley Imbrogno at the ’81 Class Reception.
### 1980

**Samia Borchers, M.D.**, recently became the first woman to be named Outstanding Dermatologist of the Year by the Ohio Dermatologic Association. She was recognized for her work on a skin cancer and sun-awareness education program aimed at teens and pre-teens. She is also a clinical assistant professor of medicine at Wright State.

### 1981

**Frank Cebul, M.D.**, practices at the Wooster Clinic in Wooster, Ohio. He has served six years on the clinic’s board of directors and three years on the St. Mary’s Church Pastoral Council. He has also been a youth soccer coach for eight years and has a black belt in karate. He and his wife Linda have three children: Mark, Paul, and Cathy.

**Kevin Stange, M.D.**, practices general surgery at the Alaska Native Medical Center in Anchorage, Alaska. He and his wife Cathy, a pediatric nurse practitioner, have three children: Katie, Kevin, and Emily.

### 1982

**David Scott Felder, M.D.**, lives in Boca Raton, Florida, with his wife Cindy and their two children, Zachary and Haley, ages nine and four, respectively. He practices ophthalmologic plastic surgery at the Cosmetic Eyelid and Laser Center of South Florida in Fort Lauderdale.

### 1984

**Parmie Herman, M.D.**, was recently presented with the 2001 Golden Paradigm Achievement and Service Award from St. Rita’s Medical Center in Lima, Ohio, and the Girl Scouts of Appleseed Ridge. The award recognizes women of West Central Ohio for outstanding achievement. Dr. Herman practices family medicine in Wapakoneta, where she lives with her husband, Dr. George Herman.

### 1986

**Janet C. Dunn, M.D.**, is a pediatrician at Mary Rutan Hospital in Bellefontaine, Ohio. She and her husband Brian have four children: Noelle, Ryan, Christie, and Carolyn.

**Jennifer N. Klopstein, M.D.**, practices physical medicine and rehabilitation with Medical Rehabilitation Associates in Milwaukee, Wisconsin. She has also been the medical director for Covenant Rehabilitation Services. She and her husband Steve have one child, Elliot.

**Mary Lou Zwiesler, M.D.**, practices with Woodbury Family Medicine in Dayton, Ohio. She and her husband Jerry have raised two children: Daniel, a City of Dayton police cadet, and Julie, a first-year medical student at The Ohio State University.

### 1991

**Vivian von Gruenigen, M.D.**, was recently featured in *Northeastern Ohio Universities College of Medicine Magazine* as the leader of a team of physicians studying the use of complementary and alternative medicines (CAM) and treatments in different cultures. The team intends to identify use patterns, beliefs, and potential harms or benefits resulting from CAM use by Amish obstetrics/gynecology patients, gynecological oncology patients, and general gynecology patients.

### 1992

**Gaetano S. Cavaliere, M.D.**, has become an anesthesiologist as part of the Samaritan Regional Health System in Ashland, Ohio. He completed his anesthesiology internship and residency at the Medical College of Ohio.

### 1994

**Thomas Fritinger, M.D.**, recently opened a medical practice in the Crestline Specialty MedCenter in Crestline, Ohio. His family practice residency was completed at Barberton Citizen’s Hospital in Akron, Ohio.

### 1996

**Kevin Bogar, M.D., and Lisa Bogar, M.D.,** and have two children, Lauren Marie and Anthony David. Lisa practices with Patient First in Berea, Ohio, and Kevin practices with Marymount Primary Care Services in Garfield Heights, Ohio.

**Daniel Malkamaki, M.D.,** practices at MetroHealth Medical Systems in Cleveland, Ohio. He and his wife Solene have two children, Matias and Thomas.

**Terri Lynn Savage, M.D.,** recently opened an internal medicine/primary care practice in Springboro, Ohio. She performed her residency and a cardiology fellowship at Good Samaritan Hospital in Dayton, Ohio.
1997
Timothy L. Todd, M.D., who practices adult psychiatry, recently joined Dettmer Outpatient Services for Behavioral Healthcare in Troy, Ohio. He is a member of the American Psychiatric Association and the American Medical Association.

1998
Diana Frey, M.D., recently joined the Millhon Clinic in Columbus, Ohio. She is specializing in Internal Medicine.

Gregory Mickunas, M.D., has joined the Holzer Clinic in Pomeroy, Ohio. He completed his family practice residency program at Miami Valley Hospital in 2001, where he received the emergency room physician’s recognition of being one of the “Top Five Residents” at the hospital in 2000.

1999
Ann Marie Stuart, M.D., and her husband James, had a baby boy, Grant Thomas, on June 14, 2001. She plans to finish her family medicine residency in Spartanburg, South Carolina, in June 2002, and will return to work with a physician in Medina, Ohio.

2001
Jennifer Dickerson, M.D., and Mark Ritzenthaler were married on May 25 at the Trinity Lutheran Church in Columbus, Ohio. Dr. Dickerson is currently a resident in Internal Medicine at Ohio State University. Her husband is a technology specialist for Dublin City Schools.

Congratulations to this year’s School of Medicine Outstanding Alumni Award winners Drs. Randy Marriott (’91) and Timothy Manuel (’91) (see article pages 11 to 13). This annual award honors alumni who have distinguished themselves through professional accomplishments, community service, high standards of integrity, and the advancement of their alma mater. Past recipients of this award are Drs. Alan McGee (’82) and Gary Onady (’87).

Last Call for the Medical Alumni Directory
Thanks to all of our alumni who have taken the time to contribute to our Medical Alumni Directory. The directory will be printed in April, and all orders should arrive by early May.
We are publishing only enough directories to cover pre-publication orders; however, there may still be some available. So, if you haven’t placed your order yet, please contact the Bernard C. Harris Publishing Company at 1(800) 877-6554.
**NEW FACES**

**Mehdi Adineh, Ph.D.**
Assistant Professor, Internal Medicine  
Ph.D.: Wright State University (biomedical sciences)

**Gary M. Horowitz, M.D.**  
Lt. Colonel USAF, MC (retired)  
Associate Professor, Obstetrics and Gynecology  
M.D.: University of North Carolina School of Medicine  
Residency: Wilford Hall USAF Medical Center (obstetrics and gynecology)  
Fellowship: Mount Sinai Medical Center (reproductive endocrinology)

**W. Scott Richardson, M.D.**  
Associate Professor, Internal Medicine  
M.D.: Georgetown University  
Residency: University of Rochester Medical Center (internal medicine)  
Fellowship: University of Rochester Medical Center (general internal medicine)

**Paul J. Schwartz, M.D.**  
Associate Professor, Psychiatry  
M.D.: University of Cincinnati College of Medicine  
Residency: University of Cincinnati College of Medicine (psychiatry)  
Fellowship: Yale University School of Medicine (psychiatry)

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**OF PRIMARY INTEREST**

**Coalition Receives Community Grant**

A joint press conference held at the Wright State Kettering Center announced the receipt of the Community Access Program grant. (L–R) Joe Krella, President and CEO, Greater Dayton Area Hospital Association; Dannetta Graves, executive director of the Montgomery County Department of Job and Family Services; Dean Howard Part; Congressman Tony Hall; and Bill Bines, health commissioner, Combined Health District of Montgomery County.

Katherine Cauley, Ph.D., director of the Center for Healthy Communities and associate professor of community health and of professional psychology, and Rudolph Arnold, M.D., director of the Miami Valley Health Improvement Council, serve as co-directors for a new community grant.

Montgomery County joins approximately 50 communities nationwide awarded a federal grant from the Community Access Program initiative in the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services. The $936,000 grant will support the development of a comprehensive, community-wide plan to improve access to health care services for individuals without health insurance.

Pilot programs will increase outreach efforts, direct and link people to available resources, and use advanced technology to coordinate health care and human services.

The grant proposal was the brainchild of HealthLink Miami Valley, a broad coalition that has been meeting under the leadership of Richard J. Schuster, M.D., Boonshoft chair and the director of the Division of Health Systems Management, for 18 months to develop strategies for better integration of health care services. The HealthLink Miami Valley Network includes representatives from the following organizations: the Center for Healthy Communities; the Department of Pediatrics, the Department of Community Health, and its Division of Health Systems Management at Wright State University School of Medicine; the Miami Valley Health Improvement Council; the Combined Health District of Montgomery County; the Greater Dayton Area Hospital Association; CareSource; Montgomery County Job and Family Services; the Alcohol Drug Addiction and Mental Health Services Board; the Dayton Area Chamber of Commerce; the Gem City Medical, Dental, and Pharmaceutical Association; The Dayton Foundation; and the Health Ministries Association of Southwest Ohio.

At the end of this planning year, the HealthLink Miami Valley network hopes to implement a long-term plan to ensure that every Montgomery County resident has access to health care services.
Program Wins Presidential Award

Horizons in Medicine, the university’s longest-running enrichment program, was named Outstanding Unit at the 2001 President’s Awards for Excellence Ceremony. More than 420 high school students have attended the School of Medicine’s summer program. Almost 95 percent of eligible participants have entered college. Approximately 35 have already completed medical school and another 20 are currently in medical school, including six of our current medical students.

Faculty Awards

Thomas N. Hangartner, Ph.D., professor of biomedical engineering, medicine, and physics, was appointed Brage Golding Distinguished Professor of Research Wright State University by the Board of Trustees.

Syed Ahmed, M.D., past associate professor of family medicine, received the Faculty Excellence in Professional Service Award from the university.

At the Fourth Annual Awards Ceremony, Teaching Excellence Awards were given to Jane N. Scott, Ph.D., Thomas Mathews, M.D., Stuart J. Nelson, Ph.D., and John F. Donnelly, M.D. Mentors’ Awards were given to Nancy J. Bigley, Ph.D., and Sidney F. Miller, M.D.

Excellence in Medical Education Awards were given to Robert D. Reece, Ph.D., and Mary T. White, Ph.D.

The Annual School of Medicine/VA Mixer honored four individuals for meritorious service at the Dayton Veterans Affairs Medical Center: Maritza H. Rivera, M.D., clinical assistant professor of internal medicine; Christiana Adesanya, M.D., clinical associate professor of internal medicine; John Cunningham, M.D., clinical associate professor of surgery; and Anil Krishnamurthy, M.D., assistant professor of orthopedic surgery.

Participants at the Annual School of Medicine/VA Mixer.
**Student Awards**

Several students were honored at the Fourth Annual School of Medicine Awards Ceremony.

- **ICM I Award**
  - Sara G. Gage

- **Human Structure Award**
  - Anis Miladi

- **Molecular, Cellular, and Tissue Biology Award**
  - Mary E. Rodes

- **Principles of Disease Award**
  - Tyler A. Hall

- **Term I Award**
  - Marlo N. Oyster

- **ICM II Award**
  - Kimberly G. Deringer

- **Term II Award**
  - Jacob B. Jones

- **John C. Gillen Award for Family Medicine**
  - Andrea C. Harner

- **Medicine Clerkship Award**
  - Frank M. Castellano

- **Pediatrics Clerkship Award**
  - Carrie C. Strauss

- **Women’s Health Clerkship Award**
  - Harry R. Vanderwal

- **Silver Scalpel Award**
  - Bradley A. Otto

- **Abraham Heller Psychiatry Clerkship Award**
  - Stephanie E. Ackner

- **McGraw-Hill/Appleton and Lange Award**
  - Tyler A. Hall and Anis Miladi

**Distinguished Guest**

Thomas Novotny, M.D., M.P.H., former assistant surgeon general and the deputy assistant secretary for international and refugee health for the U.S. Public Health Service, was invited to campus by Wright State’s medical students who wanted to better understand global health issues. He accepted their invitation and addressed classes in early January. Novotny discussed global issues of tobacco and alcohol use, the HIV/AIDS epidemic, prenatal care, and infectious diseases with first- and second-year medical students.

**Wilderness Expo 2002**

More than 125 attended Wilderness Expo, sponsored by the Department of Emergency Medicine with assistance from the Office of Public Relations. Faculty presented multimedia presentations on a wide variety of topics, including hypo- and hyperthermia; altitude sickness; injuries; travel medicine; and poisonous plants and insects. Medical students assisted faculty at workshop stations on splinting and first aid. The last two presentations of the day were one on bioterrorism and a personal account of time spent at Ground Zero.
<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Contact</th>
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<tbody>
<tr>
<td>Faculty Meeting</td>
<td>May 16, 2002</td>
<td>4:30 p.m.</td>
<td>035 Medical Sciences</td>
<td>(937) 775-3010</td>
</tr>
<tr>
<td>Medicine Ball</td>
<td>June 5, 2002</td>
<td>8:00 p.m.</td>
<td>Crowne Plaza</td>
<td>(937) 775-2934</td>
</tr>
<tr>
<td>Student National Medical Association Dinner</td>
<td>June 6, 2002</td>
<td>6:00 p.m.</td>
<td>Crowne Plaza</td>
<td>(937) 775-2934</td>
</tr>
<tr>
<td>Graduation</td>
<td>June 7, 2002</td>
<td>6:30 p.m.</td>
<td>Memorial Hall</td>
<td>(937) 775-2934</td>
</tr>
<tr>
<td>Student Clinician’s Ceremony</td>
<td>July 16, 2002</td>
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<td>(937) 775-2934</td>
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<tr>
<td>Convocation</td>
<td>August 4, 2002</td>
<td>3:00 p.m.</td>
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<td>(937) 775-2934</td>
</tr>
<tr>
<td>Alumni Baseball Outing with the Dayton Dragons</td>
<td>August 11, 2002</td>
<td>12:00 p.m. Pre-game Picnic</td>
<td>2:00 p.m. Game</td>
<td>(937) 775-2972 or <a href="mailto:som_adv@wright.edu">som_adv@wright.edu</a></td>
</tr>
<tr>
<td>Faculty Meeting</td>
<td>September 19, 2002</td>
<td>4:30 p.m.</td>
<td>035 Medical Sciences</td>
<td>(937) 775-3010</td>
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<tr>
<td>School of Medicine Reunion Weekend 2002</td>
<td>October 4–5, 2002</td>
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<td>(937) 775-2972 or <a href="mailto:som_adv@wright.edu">som_adv@wright.edu</a></td>
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