Physicians serving their country
Features

2 Military Service: A Mayo Clinic tradition
Physicians and other care providers serving in the military is a long standing tradition at Mayo Clinic. How that practice continues today is revealed in the stories of five Mayo Clinic physicians who have served as medical officers in the war with Iraq.

8 After the storm
Saint Marys hospital was the result of a partnership between W.W. Mayo, M.D. and a Franciscan nun, Mother Alfred Moes that occurred after a tornado destroyed much of Rochester in the late 19th century. In the days following Hurricane Katrina, Mayo staff once again responded to needs of the victims of one of our nation’s greatest natural disasters.

12 Women’ s Health Clinic
As baby boomers grow older but want to continue their busy and active lives, women in this group are seeking care for medical problems that emerge during menopause. A new women’s clinic at Mayo Clinic Rochester is meeting the needs of these women who want to be healthy as they age.

16 100 years of the Department of Laboratory Medicine and Pathology
Lester Wold, M.D., emeritus chair of the Mayo Clinic Department of Laboratory Medicine and Pathology, has recently written about the contributions to the practice of medicine achieved during the department’s 100 years.

18 Skills learned in his youth have carried Glenn Forbes, M.D., to leadership positions at Mayo Clinic
A profile of Glenn Forbes, M.D., radiologist and new CEO of Mayo Clinic Rochester

Mayo Update

24 News briefs
27 Professional meetings
28 Postgraduate meetings
29 Alumni news
30 Staff news
30 Fellow, resident and student news
30 Obituaries
32 Mayo Clinic Resource Central
Letter from the Secretary-Treasurer

As I write this first letter, I want all of you to know that I am honored to serve as one of the leaders of the Mayo Clinic Alumni Association and to serve as chair of this magazine’s advisory board. Through the stories we tell in this publication, we will illustrate the goals of our organization, the many changes in health care and the contributions all of you make to medicine. I’m committed to working with our leaders to promote excellence in patient care, education and research and to continue the mutually beneficial relationship between you and Mayo Clinic.

You are important to Mayo, and the institution has listened to your suggestions and concerns about your professional relationship with Mayo, especially the challenge of getting your referred patients seen in a timely way.

Happily, I can report that we have improved that process, based on your feedback, and have made changes across the organization, so the process for seeing Mayo Alumni referred patients is the same in Rochester, Jacksonville and Arizona. If you wish to refer a patient, identify yourself as an alumnus or alumnae when making your referral. This will assure that your request receives priority attention. The clinic will attempt to schedule the appointment with a single phone call. Specific information for referrals can be found on the Alumni website.

We continue to work on improving the time frame in which we communicate with our referring physicians once their patients have been seen. We are committed to making this better, and alumni who recently have referred patients tell us the process has been improved and they appreciate it. As we proceed, we will continue to seek your feedback through conversations and surveys.

As you read this issue, you will find two stories that exemplify the values of Mayo Clinic – the values that permeated our training here. One is the story of physicians serving in Iraq and another features physicians in Louisiana. In addition to these, we recognize the 100 year history of the Department of Laboratory Medicine and Pathology. Looking ahead to future issues, we will highlight the efforts Mayo Clinic is leading to ensure the highest quality of care and our participation in public reporting. We will also continue to highlight the successes of our alumni. We welcome your suggestions and comments on the material we publish and send to you each year.

Please mark your calendars for the 65th Mayo Clinic Alumni Association Meeting in Rochester, October 18 – 20, 2007. The theme of this meeting is Mayo Clinic Past, Present, and Future. Come to renew old friendships and to see the changes in Mayo Clinic. I look forward to seeing you there.

Sincerely,

Eric Edell, M.D.
Pulmonary and Critical Care Medicine, 1988
Secretary-Treasurer
Mayo Clinic Alumni Association

Correction:
On page 3 of the Fall 2005 issue, David E. Donald’s credentials are incorrect. He holds a Ph.D. and not an M.D. as listed. We regret the error.

On page 1 of the Winter 2006 issue, Melissa Meredith’s name is misspelled in the list of the Alumni Board of Directors. We regret the error.
The tradition of Mayo Clinic physicians serving in the military began during the Civil War when William Worrall Mayo, M.D., was appointed examining surgeon for the Union Army Enrollment Board. The board was headquartered in Rochester, Minn., so Dr. Mayo moved his family to the growing community in 1864. His sons were to follow his lead of service to their country.

Several years before World War I, the Mayo brothers were commissioned first lieutenants in the Medical Reserve Corps. During World War I, Mayo Clinic helped organize and supported a medical unit stationed on the Western Front in France, but neither Dr. Will nor Dr. Charlie saw action there. Instead, they served on the General Medical Board of the United States Council for National Defense, which was formed in 1916 to prepare America for possible military action. They also served as surgical consultants to the Surgeon General of the U.S. Army. In 1921 they were made brigadier generals in the Medical Reserve Corps of the U.S. Army. President Franklin D. Roosevelt honored them in 1934 for providing care to war veterans.
Charles and William Mayo both died in 1939 just as World War II was breaking out in Europe, but the Mayo legacy continued. Mayo Clinic medical units served in New Guinea and the Philippines during the war, and Mayo scientists at home conducted pioneering aero-medical research that included oxygen masks and an anti-blackout suit for pilots.

Through the reservist programs today, Mayo physicians can serve their country and continue to grow their knowledge and expertise in medicine and medical research by serving patients at Mayo Clinic.

In recent years, the United States has again been involved in military conflicts overseas and, again, Mayo physicians have been asked to serve their country.

Mayo Alumni magazine recently talked with five Mayo physicians who have served in Afghanistan and Iraq. They talked about their experiences and how they used their skills to take care of patients in settings that took them away from their families, homes and Mayo Clinic careers for many months.

In addition to these physicians, many other Mayo physicians and allied health staff have served or are serving in units in these most recent conflicts. The stories of these five men reflect individual experiences, but also some universal feelings.

**John L. Black, M.D.**

*Psychiatry*

Sometimes, Dr. Black didn’t care to do the math — calculating risk.

While Dr. Black served in Baghdad in 2003 as the public health team chief, the daily routine was to check for bombs in any vehicle he would be riding in or driving — each time the team prepared for a trip. A drive to a work site meant risk. At the end of his tour in Iraq, Dr. Black had gone on 58 missions into zones considered hostile. Mortar rounds and rockets exploded nearby with regularity even when in the relative safety of the coalition-controlled Green Zone in Baghdad.

“You know that it was just the grace of God that none of my team was injured while I was with them, but in fact several members of the team were injured in an attack before I joined the team in May,” says Dr. Black, director of Mayo Clinic Rochester’s Psychogenomics Laboratory and a consultant in the Department of Psychiatry and Psychology.

“In that setting, you are living in an area with tremendous risk, but you put it out of mind and focus. It’s there, it’s real, but you try to follow your training. It was such an opportunity to help so many people that you focused on that aspect.”

And after he faced life and death situations nearly every day, life back at home took on a different meaning after Dr. Black returned.

“At first, everything seemed so irrelevant back here,” says Dr. Black. “You come back from a situation where it’s life and death and there’s a real sense of purpose and then I’d turn on the TV, see some of the programming and just wonder why anyone would watch it. You gradually adapt, and I find some of that programming entertaining now.”

Dr. Black’s role was to lead a public affairs team whose mission would be...
was to re-establish Iraq’s Ministry of Health. To accomplish this, they needed to make sure various ministry positions were filled, get pharmacies operational again, coordinate aid into the country and assist in evacuating patients from the country when greater care was needed.

It was nonstop work headquartered in the Green Zone, a relatively safe section of Baghdad, but the work took Dr. Black to many cities throughout Iraq, familiar names now to Americans: Fallujah, Mosul, Ramadi and others.

Dr. Black said the day was framed by a routine of sorts, but the challenges faced each day could be, and often were, different from the previous day. “There were certain points in the day that were routine, with scheduled briefings and meetings, but it was never routine in between,” he said.

It was satisfying work, despite the challenges, says Dr. Black.

“How often do you get a chance to help a whole country?” asks Dr. Black. “You are helping re-establish the health care system for 25 million people. It’s a great opportunity, and it changes you. I won’t see something like this again in my lifetime.”

However, the work helped prepare Dr. Black for another assignment: Team 1 commander of Minnesota Lifeline, which provided relief efforts to Hurricane Katrina-affected areas. “We knew what to do and what to expect by applying what we had learned in a military situation to a civilian situation,” Dr. Black says.

Henry Schiller, M.D.
Trauma, Critical Care and Surgery

The rules of walking in Afghanistan still tugged at Dr. Schiller once he returned home, standing at the edge of his front yard in Rochester, Minn.

“We saw so many land mine injuries, you were reminded that you did not step anywhere except on blacktop, footprints or tire tracks,” says Dr. Schiller. “And as irrational as it was, I stopped for a moment at the edge of my own front yard.”

Like many of his Mayo Clinic colleagues, Dr. Schiller said transitioning back into everyday life in Rochester was sometimes more challenging than the work in a war zone. Dr. Schiller, a Mayo Clinic trauma surgeon, served during call-ups of his reserve unit in Afghanistan and Iraq.

“You come home and you feel like something should be different here because you were all working so hard to make a difference over there,” says Dr. Schiller.

Dr. Schiller’s unit saw U.S. and enemy military injuries, as well as civilian injuries.

“You are a soldier, but your training and professionalism take over in those cases: a patient is a patient,” says Dr. Schiller. “You just wanted to be sure that the person was frisked for grenades before he was brought in.”

Even Baghdad’s Green Zone did not feel secure, said Dr. Schiller. He went out on his daily exercise run clutching his pistol.

“Mortar rounds and rockets would hit around where we were,” he said. “I’d be out for my morning run and wasn’t always sure whether I should continue or hide.”

The convoys into other parts of Iraq were the most worrisome to Dr. Schiller. “The convoys were terrifying because you’d slow down so much in bottlenecks in small towns,” he says. “I was just struck by the randomness of so much of it. You might just be at the wrong place at the wrong time.”

Dr. Schiller said there were opportunities in Afghanistan and Iraq to teach and make presentations to medical professionals. There was interest in learning, and Dr. Schiller said it helped bond the U.S. physicians with those in the country where they were serving.

The U.S. physicians also were learning. “You learned that very basic wound care techniques do well even in a very filthy environment,” says Dr. Schiller. “You had to make do with what you had and do the best you could for the patient.”

With roadside bombings a daily occurrence, moving in convoys from one trouble spot to another is especially dangerous in Iraq. Even physicians keep firearms in their hands.
A cheer erupted from Dr. Sawyer and his surgical team when the military transport airplane they were aboard finally lifted off for their mission in Iraq in 2003.

“It wasn’t that we were excited to be going into a war zone; it was that we were excited that finally we would be able to do what we’d been training for,” says Dr. Sawyer.

Evaluated in 2004 by the U.S. Army, Dr. Sawyer’s forward surgical team was deemed the best among the U.S. Army Reserve units in Iraq. He concurred, noting that after the team was able to reach a location in their six Humvees and trailers, they could set up and be ready to operate in one hour.

Their headquarters was an abandoned Iraqi air base, which they had to clean before setting up.

“When we got to the base, it was in horrible condition with dead animals and waste,” he said. “But we eventually turned it into something that was very useful.”

Dr. Sawyer said that he saw scenes of village life that reminded him of pictures from his childhood Bible.

“It was a kid’s Bible, and it was a lot like walking into the pictures of that book with its scenes of shepherds or goatherds who had probably been doing this the same way for centuries,” he said.

Dr. Sawyer’s unit was in charge of emergency acute surgeries, performing their work at the hospital they established or in the field, traveling in convoys through trouble spots in the region.

“You felt most vulnerable in the convoys,” says Dr. Sawyer. “I’d ride for eight straight hours with my firearm in my hand in those convoys.”

Dr. Sawyer said the most surprising part of his service was how quickly he could adapt to a war zone, but how much longer it took to adjust once he returned home.
In Iraq, you were drilled constantly to always have your helmet, gas mask and weapon. I’d catch myself in Rochester, checking to see if I had them.”

— Dr. Paul Huddleston

We expected to treat injuries from the war, but it is easy to forget that life’s normal injuries still occur — you still have car accidents and sprained ankles and broken thumbs,” says orthopedic surgeon Paul Huddleston, who cared for U.S. soldiers and Iraqi residents during his stay there.

Paul Huddleston, M.D.
Orthopedics

For a week or so after he returned to Mayo Clinic Rochester, Dr. Huddleston always paused when he prepared to leave a meeting. Then he would chuckle momentarily at his own private joke.

“In Iraq, you were drilled constantly to always have your helmet, gas mask and weapon. I’d catch myself in Rochester, checking to see if I had them,” he says.

An orthopedic surgeon, Dr. Huddleston served with Dr. Mark Sawyer, his commander, in a mobile surgical team. He served seven and a half months in 2003 and says he and Dr. Sawyer often offered each other support and found inspiration in their work.

“You’re hot, you’re lonely, you miss your family, it’s tough,” says Dr. Huddleston. “But then you save someone’s life. It’s a powerful thing.”

The training and daily work at Mayo Clinic proved to be good for the situations he encountered in Iraq, says Dr. Huddleston.

“The environment we have at Mayo Clinic is one where you have to be adaptable and get it done, because the needs of the patient come first,” says Dr. Huddleston. “So when you were faced with challenges in Iraq, you were able to be creative and serve the needs of the patient. People who came from different medical environments that were perhaps more rigid about specific protocols, had difficulties.”

Dr. Huddleston said he saw many arm and leg wounds because the improved body armor used by soldiers is effective in protecting the torsos of the soldiers. When they weren’t treating military patients, he was treating civilian wounds. As word spread of his expertise as an orthopedic and spine surgeon, soldiers from other areas of Iraq, as well as the locals, came for care.

“You forget that life’s normal injuries still occur,” Dr. Huddleston says. “You still have car accidents, sprained ankles and broken thumbs. But you’re also in a war zone, so there are injuries from bullets and bombs.”
Brian McGlinch, M.D.

Anesthesiology

Not everyone traveled to a war zone.

Dr. McGlinch, an anesthesiologist at Mayo Clinic Rochester, was stationed at Walter Reed Army Medical Center (WRAMC) in Washington, D.C., in 2005. He updated Mayo Clinic colleagues with periodic notes on his activities and impressions of his service to the wounded.

Watching the news events of what was occurring in Iraq or Afghanistan often was the first notice of the arrival of new patients within the week.

“If you read in the newspaper about fighting or soldiers injured, we received them from that event within a week,” he said. “But there are exceptions. Take the example of a soldier injured during an offensive along the Syrian border. An IED (improvised explosive device) explosion critically injured him on a Thursday afternoon. His limbs were either vaporized or pulverized and shrapnel struck his belly and neck — severing his carotid artery.

“The field hospital explored the wounds, placed a length of IV (intravenous) tubing to span the carotid defect and a vascular injury in his leg, explored and packed his belly open, then flew him to Baghdad where more refined surgery was conducted. The soldier was then transported to Germany, then directly to us where he underwent surgery in our WRAMC operating rooms on the following Monday, slightly more than 72 hours after his initial injury.”

The bonds that develop between physicians and the soldiers and their families were due in part to the operational difference between field hospitals and WRAMC. Surgeries performed in Iraq or Afghanistan are primarily for stabilization and salvage in order to move the injured away from the battlefield and out of those countries.

If a soldier survives the initial injury, all efforts are made to repatriate him or her to Walter Reed. There, complex and reconstructive surgeries are performed, often requiring frequent operations for each injured soldier for extended periods, Dr. McGlinch says. At Walter Reed, soldiers are reunited with their families.

“It is hard not to develop affection for the soldiers,” wrote Dr. McGlinch. “We usually see them progress from intubated, sedated, unstable patients to more vibrant (and skinny) friends who remember us as well as we remember them.”

He closed one note to colleagues last summer this way: “Soldiers are receiving exceptional care as are their family members. I am proud to be here. But WRAMC is not home, and I am lonely for your friendship and professional support.”

— Michael Dougherty
In the wake of Hurricane Katrina, Mayo Clinic reached out to Gulf Coast residents with its unique brand of care. Millions of people watched the scenes of destruction and desperation in helpless disbelief on Aug. 29, 2005, when Hurricane Katrina hit Louisiana. And there was little relief in the days that followed when levees broke and New Orleans flooded.

At Mayo Clinic, the disaster prompted a quick reaction. On Sept. 2, Mayo Clinic President and CEO Denis Cortese, M.D., announced Mayo was pledging $1 million to hurricane relief. In addition, Mayo had

The people of Mayo Clinic have responded to the destruction left in the wake of natural disasters since the very early days of the practice. On August 28, 1883, a tornado swept through Rochester. A telegraph message to the governor of Minnesota called for help: “Twenty-four people were killed. Over forty are seriously injured. One-third of the city laid waste. We need immediate help.” On that day, 122 years and one day before Hurricane Katrina swept across the Gulf Coast, Dr. W.W. Mayo and his sons Will and Charlie immediately began to care for the wounded in make-shift quarters above a dance hall. Help was scarce, so Dr. Mayo turned to Mother Alfred Moe, a Franciscan nun and leader of a small group of sisters who were teaching in Rochester. Mother Alfred agreed to help, and the sisters quickly learned the ways of medicine. From that early partnership grew Saint Marys Hospital and a strong relationship with the Franciscan Sisters that still exists today.

In the wake of Hurricane Katrina, Mayo Clinic reached out to Gulf Coast residents with its unique brand of care. Millions of people watched the scenes of destruction and desperation in helpless disbelief on Aug. 29, 2005, when Hurricane Katrina hit Louisiana. And there was little relief in the days that followed when levees broke and New Orleans flooded.

At Mayo Clinic, the disaster prompted a quick reaction. On Sept. 2, Mayo Clinic President and CEO Denis Cortese, M.D., announced Mayo was pledging $1 million to hurricane relief. In addition, Mayo had
contacted officials in Louisiana and was preparing to provide medical assistance.

“Mayo Clinic will do everything in its power to assist the people so seriously affected by this natural disaster,” said Dr. Cortese. “The needs of the patient come first. It’s our primary value and our sole priority.”

Mayo Clinic’s relief efforts involved hundreds of staff members from throughout the organization. The first group of Mayo personnel departed for Louisiana on Sept. 4, and the last did not leave the Gulf region until Nov. 3. Throughout those two months, Mayo Clinic’s commitment to putting patient needs first, its team approach to medicine, and the emphasis it places on efficient operations came together to provide critically needed care to thousands.

A team to depend on

The first Mayo staff to arrive in the hurricane-devastated area was a team of nine paramedics in three ambulances and a specially equipped sport utility vehicle from Gold Cross, part of Mayo Medical Transport. The group was involved in a nationwide dispatch of ambulances coordinated through the American Ambulance Association in response to a request from the Federal Emergency Management Administration (FEMA).

The team included staff from Rochester, Duluth, Albert Lea, Mankato, Austin and St. Cloud, Minn., and Eau Claire, Wis. As the teams rotated, other Gold Cross personnel who participated included staff from Mankato, Litchfield, Little Falls and Fairmont, Minn.

Below: In addition to health care needs related to the storm, many New Orleans residents needed primary care services such as tetanus shots and Hepatitis A vaccinations. At left Mayo Clinic registered nurse Jeffrey Coble treats evacuee John Anderson who was one of 18,384 patients vaccinated by Mayo personnel.

Stationed in New Orleans, Gold Cross worked closely with local emergency medical services (EMS) to respond to emergency calls, participate in rescue operations, provide medical assistance at a triage center for evacuees, and accompany firefighters on calls.

The sophisticated equipment in the Gold Cross ambulances was well suited for the ambulance staff’s work in New Orleans. The vehicles include a communication system of portable radios and computers with global positioning systems (GPS). This technology made it possible for the rescue teams to communicate among the ambulances or to talk with the dispatcher in a manner similar to instant messaging.
“Our communication system is not common in ambulances, and we were able to use it without any trouble in New Orleans,” says Jill Norman, a Gold Cross paramedic who went to the Gulf region twice and served as a team leader during one trip. “With the lack of reliable communication throughout the city, we were in high demand.”

As they got to know the Gold Cross staff, local EMS personnel also came to rely on them for their dependability.

“Before we arrived, our team agreed we were going to maintain a professional attitude, no matter what,” says Jim Lunt, a Gold Cross paramedic from Austin, Minn. “We didn’t want to be labeled, as some were, a ‘cowboy service’ who wouldn’t follow the command. We did whatever they asked. I think they saw that and appreciated it.”

Local respect for Gold Cross was illustrated by two requests to extend the group’s 30-day contract, for 14 days each. By Oct. 21, Gold Cross was one of only two services from outside the New Orleans region of those initially deployed by FEMA.

“I’m proud of the work we did,” says Lunt. “No matter what the circumstances, we understood our mission clearly — taking care of patients and ensuring their needs came first.”

**A comprehensive effort**

While Gold Cross was working in New Orleans, another Mayo Clinic operation was in full swing 130 miles away in Lafayette, La. For eight weeks, Operation Minnesota Lifeline involved staff from Mayo Clinic Rochester, Arizona, Jacksonville and the Mayo Health System, as well as personnel from the University of Minnesota and The College of St. Catherine in St. Paul, Minn. Four Minnesota Lifeline teams stayed for two weeks each in Louisiana, working under the direction of the Louisiana Department of Health and in conjunction with the American Refugee Committee.

From the time Team 1 arrived on Sept. 14 until Team 4 left on Nov. 3, Operation Minnesota Lifeline provid-
ed medical care at a special needs shelter, conducted mass immunizations at several other shelters — including the Cajundome in Lafayette where approximately 3,000 people were vaccinated — provided obstetric and gynecologic care, visited school clinics, staffed a public health clinic, operated a mobile pharmacy, and worked with immunization and family practice clinics.

During the operation, the teams also traveled to temporary shelters in campgrounds, motels and small towns in the surrounding areas to provide care for evacuees with chronic health conditions, and for those who needed medical attention or were running low on medication.

Priya Sampathkumar, M.D., a Mayo physician who specializes in infectious diseases, was one of the volunteers. “One of the best things Mayo did was to send a wide variety of pharmacy supplies with us,” she says. “We were able to give people medications and other essentials. They were so grateful.”

“The way the plan is set up, we had somebody to do virtually everything,” says Tom Smith, a Mayo Clinic administrator and incident commander for Operation Minnesota Lifeline. “Whatever happened, we just turned to the individual responsible, and it was done. Mayo Clinic is one of the few organizations that could pull this off because of the depth of expertise and the incredible teamwork we have.”

Its high level of organization made Operation Minnesota Lifeline stand out, according to James Rundell, M.D., a Mayo Clinic psychiatrist and one of four Minnesota Lifeline team leaders. Recently retired from the military, Dr. Rundell spent seven years as a commander for humanitarian medical missions.

“It was evident Mayo Clinic was committed to making our work in Louisiana succeed,” says Dr. Rundell. “They were so good at anticipating our needs. Whatever we asked for, we got. It was the best example of a disaster response I’ve ever seen, and I’ve seen a lot.”

A meticulously coordinated approach

The keys to making Operation Minnesota Lifeline work well were coordination and teamwork. The operation was conducted using Mayo Clinic’s Emergency Incident Command System — a plan for responding to natural disasters and other emergencies. That plan made it possible for staff at Mayo Clinic to provide all the support the teams in the Gulf region needed.

A chance to serve

In addition to providing care in Louisiana, Mayo Clinic assisted in a host of other ways. Many employees made financial contributions to hurricane relief efforts. Staff in Rochester volunteered to be part of Operation Northern Comfort, an effort organized to offer care for evacuees in Minnesota, if needed. However, the facility was not used because evacuees were not brought to Minnesota. Mayo Clinic in Jacksonville and Arizona provided care at their facilities for hurricane survivors. And, Mayo staff in many areas willingly filled in for those who went to the Gulf region.

“My Clinic’s team approach was paramount,” says Kevin Whitford, M.D., a Mayo internal medicine specialist and leader for Minnesota Lifeline Team 4. “Everyone did what needed to be done and helped wherever they could. It was a privilege to be involved, an extraordinary opportunity to serve.”

Dr. Sampathkumar says, “Being a part of this effort brought me back to the reason I went into medicine in the first place. Everyone was eager to help and, in the end, the people down there were so gracious and appreciative that I think we all gained more than we gave.”

– Tracy Reed Will

Operation Minnesota Lifeline, by the numbers…

Immunizations given: 24,017
Patients vaccinated: 18,384
Prescriptions written: 5,887
Patients examined: 5,263
Medications given: 3,323
Mental health consultations: 529
Referrals to specialists or advanced care facilities: 244
Finding the right personal health information is often a challenge because there is so much of it. The new multidisciplinary Women's Health Clinic for menopause and sexual medicine helps women find answers specific to their concerns.
IN THE SUMMER OF 2002, initial findings of a nationwide Women’s Health Initiative study provoked questions regarding the safety of estrogen replacement for postmenopausal women. Women and their physicians were forced to rethink long-held assumptions about the health benefits of estrogen therapy.

Four years later, prescribing estrogen for relief from hot flashes and vaginal dryness is acceptable for short-term therapy. The question remains, however, how long estrogen should be used and for what indications beyond symptom relief.

Today, women are finding answers at the new Women’s Health Clinic for menopause and sexual medicine at Mayo Clinic Rochester. Opened in the Gonda Building in July 2005, the clinic combines multidisciplinary expertise with an integrated approach to meet the unique health needs of menopausal women.

The clinic was designed to bring together experts who provide consultative care for women experiencing menopausal issues and for women of all ages with sexual health concerns.

“Over time, it has become clear that some women have complex health issues as they go through menopause and can benefit from a multidisciplinary team approach beyond their usual primary care setting,” says Lynne Shuster, M.D., internal medicine specialist and director of the Women’s Health Clinic. “We have a group of providers from internal medicine, gynecology, psychology and clinical dietetics who partner with each woman and her physician to provide a specific plan to address her concerns.”

A path to healthy living

Women who come to the Women’s Health Clinic voice a variety of concerns. They might be experiencing troublesome hot flashes, sleep problems, mood changes or have questions about alternatives to hormone therapy or bioidentical hormones. Those with sexual concerns might be experiencing a loss of sexual interest, changes in arousal, orgasm or discomfort during intercourse.

Patients begin the consultation with an internal medicine or gynecology specialist and, if there are sexual concerns, additionally with a psychologist/sex therapist. These experts conduct a full assessment of the woman’s contributing medical and gynecological conditions, her sexual development, emotional health and overall wellness.

The unhurried, comprehensive approach to assessing each woman’s menopausal or sexual concern is central to the Women’s Health Clinic mission of serving women.

“It’s such a joy to be able to allow women to discuss openly their symptoms and concerns,” Dr. Shuster says. “For menopausal women, hot flashes get the most attention, but many women experience symptoms beyond these, such as sleep problems, anxiety or depression, memory and physical changes. Addressing these
symptoms in the context of the menopausal experience sometimes helps put symptoms in perspective for the individual woman. It also allows us to formulate a treatment plan that is most consistent with her health priorities.”

Integrated care at its best
The interdisciplinary nature of the women’s clinic mirrors Mayo’s model of care, and allows collaborating specialists to interact closely to best serve patients.

Prior to opening the Women’s Health Clinic, this group of Mayo physicians worked individually in their practices to care for menopausal patients. Within the Women’s Health Clinic, those same specialists can integrate their efforts, conferring daily about cases ranging from a simple, one-time visit to more complex cases requiring follow-up and team treatment approaches.

Women at mid life and beyond are at increased risk for cardiovascular disease and osteoporosis, among other chronic conditions of aging, while also dealing with the emotional issues of menopause. The clinic’s practice was designed to address the specific issues of menopause, along with a focus on healthy aging.

An evolving discipline
The science of female sexuality is an emerging field, and formal, academic training doesn’t yet exist for physicians treating women with sexual problems. To meet this challenge, Dr. Shuster, clinic Co-director Mary Marnach, M.D., and the team sought training across the country through courses led by specialists in female sexuality.

In addition to this education, they read extensively and visited other academic medical programs dedicated to helping women with sexual dysfunction. Adding a sex therapist to the team also was critical.

Studies have shown that 40 percent to 60 percent of women have health-related issues preventing them from enjoying their sex life to the fullest. Meanwhile, it’s also proven that a satisfying sex life is important to a woman’s well-being. There is now recognition that addressing sexual concerns should be incorporated more routinely into continuing medical care.

“More women are starting to ask their doctors about sexual concerns. But a typical office visit doesn’t allow for an in-depth conversation. For the overall emotional and physical well-being of a woman, it’s important to recognize her as a sexual being.”

— Dr. Mary Marnach
“More women are starting to ask their doctors about sexual concerns,” says Dr. Marnach, a gynecologist. “But a typical office visit doesn’t allow for an in-depth conversation. For the overall emotional and physical well-being of a woman, it’s important to recognize her as a sexual being.”

Delving into research

The Women’s Health Clinic is committed to advancing the science of menopause and sexual health by directing and participating in research.

Currently, the clinic is one of eight participating in the KEEPS (Kronos Early Estrogen Prevention Study) clinical trial to evaluate estrogen’s effects in early menopause.

“Evidence is mounting to demonstrate that estrogen may have more benefits than risks if started early in menopause,” says Dr. Shuster. “It appears that timing may be everything in determining the balance of benefits and risks of estrogen therapy. Estrogen is better at preventing than restoring aging changes in the body.”

The estrogen trial is one of several research initiatives the Women’s Health Clinic has under way to discover better methods for helping women lead healthy lives at mid life and beyond.

Meanwhile, 10,000 baby boomers are turning 50 each day in the United States. Women who are part of this group are more committed than ever to healthy aging and controlling their lives. Drs. Marnach and Shuster say quality-of-life issues such as hot flashes, insomnia, physical and mental changes associated with mid life and aging are especially important to their patients.

“Our goals,” the doctors say, “are to help women age gracefully and healthfully.”

– Renee Berg

Staff of the Mayo Clinic Women’s Health Clinic from the left: Lenae Barkey, administrator; Janice Swanson, Psy.D., licensed psychologist; and co-directors Mary Marnach, M.D. and Lynne Shuster, M.D.
ome people grumble and bundle up against the cold January winter weather in Rochester. But, in 1905, Louis B. Wilson, M.D., turned the cold into an ally to assist surgeons with intraoperative diagnoses.

Placing specimens outside on the window sills to freeze, Dr. Wilson then made thin sections through the frozen tissue, dipped each section in a solution of methylene blue stain, washed it with a salt solution and mounted it on a glass slide with a glucose mixture. The results were sections of tissue stained shades of red, purple and blue that Dr. Wilson viewed through a microscope to provide answers to surgeons within five minutes after they removed tissue. This was revolutionary progress for pathologists, surgeons and, most importantly, patients.

Dr. Wilson joined the Mayo brothers’ practice Jan. 1, 1905, and is credited as the founding member of what eventually became Mayo Clinic’s Department of Laboratory Medicine and Pathology. Last year, Mayo Clinic marked the 100th anniversary of the formal creation of the department and celebrated its many contributions to medicine and Mayo Clinic. It started with the frozen section, but did not stop there.

Lester Wold, M.D., past chair of the Department of Laboratory Medicine and Pathology, chronicled the achievements of the pathologists and their colleagues in the book Mayo Clinic Pathology: The First 100 Years. The book includes a decade-by-decade description of the people and discoveries that have occurred through the turn of the 21st century.

When asked about the common theme in the history of the depart-
ment, Dr. Wold replied, “It’s all about innovation supporting patient care.”

The book has been well received by his colleagues, who have enjoyed the stories that blend historic information with some humorous anecdotes about the characters who made their mark in pathology at Mayo Clinic. The book took about two years to complete because it was necessary to review annual reports and other archives to identify many of the statistics relating to the department’s history.

“It was really a delight to discover some of the stories behind the stories and really put down on paper a history of pathology at Mayo,” says Dr. Wold. “Hopefully this book can be the starting point for the next person to describe the second 100 years of pathology at Mayo Clinic.”

He says there are six key areas that have helped propel pathology to continued and sustained success within Mayo Clinic. He offers these examples for each area:

- Recruiting the right people at the right time: Dr. Wilson.
- Developing new techniques to support the practice: frozen section technique.
- Innovative services to support the practice: creation of the Mayo Blood Bank.
- Touching patients who may never visit a Mayo Clinic site: creation of the Regional Laboratory Services and Mayo Medical Laboratories.
- Teamwork to leverage new techniques that have a broad impact: the PTH (parathyroid hormone) assay was a tool to diagnose hyperparathyroidism early. The ability to do this assay led to more patients being referred to Mayo for surgery.
- Using Mayo intellectual property in collaboration with third parties can benefit Mayo patients with more sensitive and specific services, and benefit Mayo Clinic with new sources of income. Mayo intellectual property resulted in a kit that could be manufactured and distributed worldwide by Roche (the Roche LightCycler® and the development of molecular microbiology) with Mayo sharing in the profits.

“Review of the first century of pathology at Mayo Clinic shows the importance of teamwork to develop new tests and services to better meet the needs of the physicians and patients we serve,” says Dr. Wold.

“Teamwork will continue to be a critical success factor during the next 100 years of pathology at Mayo Clinic.”

– Michael Dougherty
Skills learned in his youth have carried Glenn Forbes, M.D., to leadership positions at Mayo Clinic

D r. Forbes, who became the new CEO of Mayo Clinic Rochester in January of this year, retells the story and its purpose:

“I’d been elected to represent our class on the student council and at the end of the year, one of my teachers remarked, ‘It went okay, but it could have been a lot better.’

“It stopped me in my tracks,” says Dr. Forbes. “I asked him what he meant, and he said ‘You know, you were elected to represent others while you were on the student council and you didn’t do anything.’

“From that point on, I decided I would never be involved in a committee or work activity where all that I did was manage the current process. If I was going to be a part of it, I was going to contribute to it and improve it.”

Dr. Forbes marched on from that point with determination, carrying with him his inquisitiveness, his quest to help others and an interest in science.

That mix of qualities has carried him far from the small town in Illinois where he grew up in the late 50’s and early 60’s, dreaming of being part of the country’s race to conquer space.

He calls his path in life “an unfolding story” rather than a journey guided by a map. “I’ve worked hard wherever I was and then a new opportunity emerged at some point,” says Dr. Forbes. “Each stage prepares you for the next role that you take on.”

He met Celeste, who would become his wife, in high school at a touch football game between their two schools in Wilmette, Ill. She attended the all-girls Marywood High School and he attended the all-boys Loyola Academy. Mixers were different then, Dr. Forbes says, referencing the football game. The two married after college, and Dr. Forbes said his wife’s support through the years has been the key to helping him succeed at his work and to maintaining a strong family.

Finding medicine

Dr. Forbes entered the University of Notre Dame intent on studying physics. The science captured his interest, but he also realized he wanted a career that included more human interactions. He found the right combination one summer.
“One summer, I worked as a mail carrier during the day and then I volunteered a couple of nights a week at a community hospital near my home,” he says. “I just started showing up, and they let me help the nurses and doctors. Then I saw that medicine was what I wanted to do.”

He switched his major to pre-medicine and graduated magna cum laude. He headed off to Connecticut in the fall of 1969 to begin at the Yale University School of Medicine. There, he found his interest in radiology.

“There was a community radiologist with an academic appointment to the medical school who invited me over to his hospital,” says Dr. Forbes. “He would say ‘now what did you learn in anatomy class today?’ And then we’d look at the anatomy and physiology through the use of X-rays and radiology. I really got excited about this world he opened up to me.”

The qualities Dr. Forbes possesses today were evident nearly 40 years ago when he first met classmate Robert Ursano, M.D., now a professor of Psychiatry and Neuroscience and chairman of the Department of Psychiatry at the Uniformed Services University of the Health Sciences, Bethesda, Md. He is also director of the Center for the Study of Traumatic Stress.

“When Glenn and I met, I saw him as someone who recognized important questions, thought with vision yet could move easily from the ‘big picture’ to the practical,” says Dr. Ursano.

“His energy and enthusiasm for his own work and for those with whom he worked was and is unmatched. I have always envied Glenn’s ability to maintain an eye on the practical, enjoy the moments as well as the adventures of life, and find the best in everyone he works with.

“These are the qualities of a leader — able to think 10 years ahead and able to see the big picture along with the practical details needed to move forward. And, always to value those around you as partners in the moments you share and in the adventures that are ahead,” adds Dr. Ursano.

“Although we have not been in the same city now for more than 30 years, we talk every year in the spring to share the breadth of life that each of us has experienced.”
The attraction of Mayo Clinic

While touring possible sites for his postgraduate training after medical school, Dr. Forbes stopped at Mayo Clinic Rochester. It was just for one day, but he remembers leaving Mayo Clinic with a clear impression that this was a great place to be.

“I realized that I had just been immersed in an environment full of good people, who were focused on good values,” says Dr. Forbes. “I called Celeste from a tollbooth somewhere in Wisconsin, and she quickly sensed my feelings and excitement about the place. She was immediately supportive and we both began planning our future together in Minnesota.”

1973 was a good time to come to the Mayo Graduate School of Medicine. Dr. Forbes’ arrival coincided with the arrival at Mayo Clinic of the first computerized tomography (CT) system in North America. Mayo Clinic physicians used the system to become pioneers in CT imaging of the head and body, developing imaging techniques that are now considered the standard diagnostic tools of medicine.

“So as ol’ Forbes was unpacking his suitcase, Mayo was unpacking this tremendous technology,” says Dr. Forbes. “It was the right place at the right time and a great training experience.”

Dr. Forbes completed fellowships in diagnostic radiology and neuroradiology and joined the Mayo staff in 1977. His interests led him to neuroradiology, particularly angiography.

What he found most appealing was that Mayo Clinic’s focus on teamwork drove innovations to improve patient care.

“I’ve really always been driven by an interest in finding ways to make something better,” says Dr. Forbes. “And at Mayo, I’ve seen what the power of teamwork can do with that interest. There are so many talented people working toward the same goal — the needs of the patient — with the same values.”

Dr. Forbes eventually became chair of the Department of Radiology at Mayo Clinic Rochester. He credits his colleagues with the support that helped him move into leadership positions at each stage of his career.

“No matter what happens or how fast medicine and technology move, our principles will not change, our pursuit of excellence will not change, our teamwork will not change, our respect and trust for our colleagues will not change and our focus on the needs of the patient will not change.”

“He said we need to get to know each other better and understand the fundamental values, so if need be, later on, we can fall back on those values to solve a problem,” Dr. Forbes says.

After serving as chair of Mayo Clinic’s Department of Radiology from 1992 to 1998, he was asked to serve as CEO of Franciscan Skemp Healthcare in La Crosse, Wis., part of Mayo Health System. In that position he also served on the Mayo Health System Board. The experience,
Dr. Forbes said, showed him how common principles and common values can bring two groups together. Dr. Forbes returned to Rochester in 2003, becoming vice chair of the Mayo Clinic Rochester Board of Governors in 2004.

Leadership

When it was announced that Dr. Forbes had been selected as the new CEO of Mayo Clinic Rochester, Denis Cortese, M.D., Mayo Clinic President and CEO, said Dr. Forbes’ leadership would build on Mayo’s successes and help continue the pursuit of Mayo’s vision to be “the premier patient-focused academic medical center.”

Looking ahead, Dr. Forbes says Mayo’s values will remain constant. Its focus will be on quality, safety and efforts to use quickly newly discovered knowledge to benefit patients.

“No matter what happens or how fast medicine and technology move, our principles will not change, our pursuit of excellence will not change, our teamwork will not change, our respect and trust for our colleagues will not change and our focus on the needs of the patient will not change,” says Dr. Forbes.

“But other things will change. Our buildings might look different in the future. Our information management systems might be different. We might function differently, but the human spirit will still manage the technology, not vice versa.”

In March of this year ground was broken to construct a new imaging research building on the Mayo Clinic Rochester downtown campus. Standing in front of the architect’s rendering of the new building at the groundbreaking, Dr. Glenn Forbes noted the importance of the work to be done in the facility and its impact on patient care. As a radiologist, he has a special interest in this new addition to Mayo Clinic.
People who know Dr. Forbes say his skills with people and belief in Mayo’s principles are a good match for the job.

“He is the most inclusive person I know,” says Franklin Earnest IV, M.D., a diagnostic radiologist at Mayo Clinic Rochester. “He has the uncanny ability to see the talents in almost everyone with whom he works, and bring out those talents.”

Others cite Dr. Forbes’ listening skills as one of the keys to his success.

“He’s first and foremost a good listener,” says Bernard Morrey, M.D., an orthopedic surgeon, who was chair of the Department of Orthopedics while Dr. Forbes was chair of Radiology.

“At that time, we were seeking a more timely availability of X-rays with our patients,” says Dr. Morrey. Glenn spent time understanding our needs and calmly explained his dilemma of economy of scale, volume/staffing considerations and limitations of process improvement in such a way that I not only understood his perspective, I even agreed with it. That interaction avoided a difficult clinical practice issue at that time.”

Dr. Forbes says radiology offered the perfect setting to learn about the other practices because of its value in supporting other departments. “My early mentor said radiology should be a place where people are comfortable coming in and consulting on cases and discussing issues,” says Dr. Forbes.
A man and his family

In his free time, Dr. Forbes enjoys skiing, sailing, golfing and astronomy. Over the Christmas holiday, his family gathered on the ski slopes for a significant milestone.

“It was my job to introduce our three year-old granddaughter to skiing,” he says. “Gramps, that’s what she calls me, took her to ski school where she learned how to stop and turn and begin to ski like her Mommy and Daddy. It was just wonderful.”

The gathering of family on the ski slopes helps connect the family — daughter Shannon and her family, and son Ryan – who no longer live in Rochester. Dr. and Mrs. Forbes find their own time together on their sailboat on Lake Superior at Bayfield, Wis., where they often venture on summer weekends.

“I’m comfortable skiing anywhere on a mountain or sailing on Lake Superior, but I’m just an average golfer,” says Dr. Forbes, referencing his third sports interest.

Closer to home, Dr. Forbes can be found trudging out into the winter night dressed in a snowmobile suit as he heads to his backyard observatory — he says it’s just a woodshed with a roof that moves to the side for an open view.

Astronomy is a passion and interest he has had since his days growing up in Illinois. “When you look up on a crystal clear winter night and see the sparkling stars above, you sense a lot of mystery and it gives you a peaceful feeling,” he says.

And when he pauses to savor the moment, Dr. Forbes says he’s always struck by how fortunate he and his family have been.

“I’m at a stage where I think our institution and community have given so much to my family and me, both personally and professionally,” says Dr. Forbes. “I want to provide the same experience to the next generation.”

— Michael Dougherty
News briefs

Mayo Clinic’s 2005 annual report: Reviewing the past and anticipating the future

As a nonprofit organization, Mayo Clinic is driven by its mission of providing the best patient care to every patient every day through integrated clinical practice, education and research. All of Mayo’s net operating income is reinvested in programs that support this mission. Mayo Clinic’s 2005 income from current activities was $275 million, which gave the institution a 4.7 percent operating margin. Mayo Clinic sets its financial target with the goal of achieving a return that will allow the institution to meet its expenses, reinvest in the practice, cover pension obligations, build its debt reserves, and grow its endowment. During 2005, Mayo’s total revenues grew by 8 percent, while expenses grew by 9 percent. The growth in Mayo’s expenses outpaced its growth in revenue due in part to important Mayo investments in patient care, research activities, and information technology infrastructure. Mayo Clinic met its financial objectives in 2005, allowing the organization to make necessary investments in strategic priorities. The overall number of individual patients seen by Mayo Clinic remained relatively stable, with both outpatient visits and admissions increasing slightly in 2005. Significant growth in benefactor support for education and research activities, and capital projects, contributed to the positive financial result. Mayo Clinic must continue its strong financial performance in the coming years to allow reinvestment in strategic, operational and capital priorities, to restore its financial reserves, and to prepare for significant financial challenges that lie ahead.

Income from patient care
Mayo Clinic staff served more than 513,000 individual patients in 2005. The total number of patient visits for all locations was 2.7 million. Mayo Clinic hospitals admitted 132,000 patients during the year, an increase of 2,000 admissions. Income from patient care remained stable at $307 million in 2005, compared with $310 million in 2004. Overall financial performance in patient care was consistent with Mayo Clinic’s multi-year financial plan.

Investing in research and education
Mayo Clinic’s net operating income is reinvested to advance the science of medicine and to teach the next generation of health care professionals. However, excess funds from operations alone can’t completely fund education and research. Overall funding for Mayo research and education programs was $567 million in 2005, an increase of $39 million over 2004. Government, foundations and industry sources provided $313 million of the total amount. Mayo Clinic invested $254 million in research and education in 2005. This includes Mayo funds and benefactor gifts. Mayo will continue to partner with foundations, benefactors, government and industry with mutual aims to support education programs that train the next generation of medical professionals and research programs that identify tomorrow’s medical breakthroughs.

Support from benefactors
More than 70,000 benefactors gave more than $270 million in 2005 to support Mayo programs, a record year for Mayo Clinic, and an increase from $203 million in 2004. Support from grateful patients, foundations, corporations and other organizations is essential to Mayo Clinic’s ability to carry out its mission in patient care, education and research, to provide outstanding facilities and technology, and to provide charity care.

Endowment
Mayo Clinic’s endowment grew by $180 million during 2005, to more than $1 billion. This growth will help to secure the future of Mayo research and education programs. Mayo’s goal is to increase the endowment to $2 billion in coming years. Mayo Clinic’s endowment is a critical element in providing a long-term funding base for these programs.

Diversified activities
Mayo Clinic’s diversified activities include health information publishing enterprises, clinical laboratory reference services, technology commercialization, and other services and products that use Mayo Clinic’s medical and scientific knowledge base. These diversified activities generated a net surplus of $33 million in 2005, which will be reinvested in Mayo Clinic programs in medical research and education.
Investment performance
Mayo Clinic’s investment performance outperformed its benchmarks on a one-, three- and five-year horizon, contributing significantly to Mayo Clinic’s overall financial performance. Mayo Clinic’s investments increased in value by $300 million in 2005, an annual return of just under 15 percent. Each year, a portion of Mayo Clinic’s investment return is used to fund research and education programs. In 2005, $78 million of investment return was allocated to support these programs.

Community benefit
As an organization, Mayo Clinic is committed to giving back to the community — both its local communities and the broader community. Mayo contributes both locally and globally by contributing time and resources to community improvement, education, public health and other initiatives; by providing care and support to those in need; and by carrying out education and research programs that benefit people everywhere. The total quantifiable benefit to the broader community in 2005 was approximately $456 million.

At Mayo Clinic, the patient is the focus of everything we do. Three organizational priorities in 2006 are aimed at ensuring that this patient focus permeates the entire organization, in every department at every location. In 2006, Mayo Clinic will focus significant effort on improving its ability to:
- Function as a unified organization with multiple locations so that wherever patients are seen, they have the same experience and know that they have access to all of Mayo Clinic’s resources.
- Build its culture of quality across the institution, so that every practice is examined to ensure that it contributes the highest-quality care and service.
- Function as a learning organization, committed to constantly improving and sharing what it has learned for the benefit of the entire organization and all of medicine.

Capital projects
Mayo Clinic continued to invest in the most advanced facilities, equipment and technology to maintain its position as a leader in health care. Capital expenditures increased by $98 million in 2005 over 2004 levels, totaling $412 million. Mayo invested about $307 million to replace and update medical equipment and technology. The organization also undertook a number of renovations and other major projects during 2005. Construction of a 214-bed hospital on the Mayo Clinic Jacksonville campus began in 2005. The new hospital will be integrated with outpatient clinical care facilities. Construction of a Mayo Clinic Specialty Building adjacent to Mayo Clinic Hospital in Phoenix also is under way. The facility will house surgeons and specialty outpatient procedural activities. A major laboratory expansion was undertaken in Rochester to support the growth of reference laboratory and pathology services provided for both Mayo patients and patients from around the world.

Honors and achievements
Mayo Clinic Cancer Center received a Specialized Programs of Research Excellence (SPORE) grant from the National Cancer Institute (NCI) for breast cancer research. The SPORE grant will bring $6.9 million over three years to Mayo Clinic to advance translational research intended to help breast cancer patients and those at risk for breast cancer.

Luther Midelfort, part of Mayo Health System, received the American Medical Group Management Association’s Acclaim Award. The Acclaim Award is the AMGA’s most prestigious quality award. This is the sixth straight year a Mayo Health System organization has been recognized by the Acclaim program and the first time that a Mayo Health System organization has won the top award.

Mayo Clinic was named one of the “Best Employers for Healthy Lifestyles” by the National Business Group on Health, a nonprofit organization. The award was given to Mayo for its commitment and dedication to combating obesity and promoting a healthy lifestyle for its employees. Mayo received a Gold Award for its health promotion efforts.

In May, physicians, staff and honored guests celebrated 50 years of heart bypass surgery at Mayo Clinic. The Mayo-Gibbon heart-lung machine, which was perfected at Mayo in 1955, led to the world’s first successful series of open-heart surgical procedures.

For the third consecutive year, Mayo Clinic was named one of the “100 Best Companies to Work For”
by Fortune magazine in its annual compilation of companies that “rate high with employees.” The ranking was based in part on a survey of employees at all Mayo Clinic sites.

Mayo Clinic Jacksonville held a groundbreaking celebration for its Mayo Clinic Hospital, which will open in 2008. Proceeds from the sale of St. Luke’s Hospital and more than $80 million in contributions from benefactors and staff paved the way for building the $255 million, six-floor, 214-bed facility.

The Mayo Clinic Collaborative Research Building, a biomedical facility that joins Mayo Clinic Arizona and the biotech firm Translational Genomics Research Institute (TGen), opened on the Scottsdale campus. The 110,000 square-foot building houses the technological, academic, research and clinical expertise of multiple strategic partners — all dedicated to the advancement of cancer research — under one roof.

Mayo Clinic’s researchers zero in on diagnosing sometimes fatal heart rhythm disorder

In conjunction with Mayo Medical Ventures, Mayo Clinic’s Long QT Syndrome Clinic and Sudden Death Genomics Laboratory, directed by Michael J. Ackerman, M.D., Ph.D., has played an instrumental role in the maturation of LQTS genetic testing from the research arena to a clinical diagnostic test which became clinically available in May 2004. LQTS is an uncommon (1 in 3,000), and sometimes fatal, heart rhythm disorder that is often present from birth. People at risk of LQTS include children, teenagers and young adults with unexplained fainting, near drowning, seizures or a history of cardiac arrest. LQTS gets its name from the peculiar pattern of the electrocardiogram (ECG or EKG) seen in people with the disease. While LQTS in some people can be diagnosed by the prolonged QT interval on an ECG, nearly 50 percent of LQTS — particularly type 1 LQTS, the most common subtype — may go unnoticed because the patient’s resting ECG is normal, he says. “The diagnosis of LQTS remains a daunting challenge,” Dr. Ackerman says. “The ECG feature of LQTS can be difficult to recognize or can be entirely absent on a standard ECG.” Now, recent discoveries should further “advance the science and heal the sick” as it pertains to this potentially fatal condition called long QT syndrome (LQTS).

In February, Dr. Ackerman’s research team published in the Journal of the American College of Cardiology findings derived from performing genetic testing for LQTS in the world’s largest cohort of unrelated patients. Between 1997 and 2004, 541 consecutive unrelated patients were referred to Mayo testing. Overall, LQTS-causing genetic mutations were discovered in more than half (272 out of 541) of the patients. Lessons from the “haves” and the “have nots” were noteworthy. First, the study revealed that when the patient’s clinical profile fit the LQTS label completely, the detection rate of the genetic test was approximately 75 percent. Second, the investigators noted that percentage of mutation-positive genetic tests varied tremendously among the physicians using the research genetic test, ranging from 0 percent to 80 percent, suggesting the need for further education.

In April, the research team published in the American Heart Association journal Circulation a novel clinical test developed at Mayo Clinic which can unmask LQTS, particularly type 1 LQTS (LQT1), even when the resting ECG is normal. Using epinephrine (adrenalin), the investigators found a characteristic paradoxical QT response that allowed the correct capture of LQT1 with 76 percent positive predictive value and 96 percent negative predictive value. Exposing concealed LQT1 can permit initiation of a simple, potentially life-saving therapy, beta-blockers, while waiting for confirmation by genetic testing.
Professional meetings

Mayo Clinic Alumni Association
Receptions

Congress of Neurological Surgeons, Oct. 7 – 12, 2006, Chicago, Ill.
American College of Surgeons, Oct. 8 – 12, 2006, Chicago, Ill.
Infectious Diseases Society of America, Oct. 12 – 15, 2006, Toronto, Canada
American College of Chest Physicians, Oct. 21 – 26, 2006, Salt Lake City, UT

Register by July 31 and join the Alumni international meeting in Croatia

It’s not too late to register for the 2006 Alumni Association International CME Program. The course runs from Oct. 11 – 13, and an optional tour of Croatia is planned from Oct. 13 – 23. Registration deadline for the CME program and the subsequent full tour program is Monday, July 31, 2006. If you register after that day, space may not be available. Full CME program details and tour information brochures are available from the Mayo Clinic Alumni Association office at 507-284-2317 or from Linda Freeman at 877-280-9066 (toll-free). You may read the brochure on the web at www.mayo.edu/alumni.
American Society of Therapeutic Radiology and Oncology, Nov. 5 – 9, 2006, Philadelphia, Pa.
American Academy of Physical Medicine and Rehabilitation, Nov. 9 – 12, 2006, Honolulu, Hawaii
American College of Rheumatology, Nov. 10 – 15, 2006, Washington, D.C.
American Society of Hematology, Dec. 9 – 12, 2006, Orlando, Fla.

Mayo Clinic 2006 Endoscopic Ultrasound Course, Aug. 3 – 5, 2006, Rochester, Minn.
Success with Failure: New Strategies for the Evaluation and Treatment of Congestive Heart Failure, Aug. 6 – 8, 2006, Fairmont Chateau Whistler, Whistler, British Columbia, Canada

Selected Topics in Rheumatology, Aug. 19 – 22, 2006, Fairmont Chateau Whistler, Whistler, British Columbia, Canada
The Intelligent Electronic Health Record (iEHR), Aug. 23 – 25, 2006, Rochester, Minn.
Practical Surgical Pathology, Sept. 14 – 16, 2006, Rochester, Minn.
Mayo Interventional Cardiology Board Review, Sept. 16 – 18, 2006, Rochester, Minn.

Postgraduate meetings

For more information, please complete and return the tear-out card in this issue. Or you may call 507-284-2509 or 800-323-2688.

Advanced Techniques in Shoulder Arthroscopy, July 8, 2006, Rochester, Minn.
Internal Medicine Board Review – Certification and Maintenance of Certification, July 9 – 15, 2006, Rochester, Minn.
16th Annual Mayo Clinic Hematology/Oncology Reviews, Aug. 1 – 5, 2006, Rochester, Minn.
16th Annual Mayo Clinic Hematology/Oncology Reviews, August 1 – 5, 2006, Ritz Carlton, Amelia Island, Fla.

Groundbreaking for the Opus Imaging Research Building in Rochester

It wasn’t a typical groundbreaking. It was March in Minnesota, and not much digging was being done, but the energized crowd included previous owners of the property who came to help with the celebration. The festive beginning for construction of a new imaging research building in Rochester was held in a tent on the building site. Above, benefactor Gerald Rauenhorst, founder of the Opus Group, greets Mr. and Mrs. Donald Connolly, longtime owners of the Connolly Hotel that once occupied the site now being prepared for construction of the Opus Building. The Opus Group gave $7M to support construction of the new facility, which also benefited from an NIH capital grant of $2.4M awarded to Mayo Clinic.

Mayo Interventional Cardiology Board Review, Sept. 16 – 18, 2006, Rochester, Minn.


Mayo Clinic Pediatric Days 2006, Sept. 18 – 19, 2006, Del Coronado Hotel, Coronado Island, Cal.


2006 State-of-the-Art Multidisciplinary Care of Breast Disease, Sept. 22 - 23, 2006, Rochester, Minn.

Minimally Invasive Surgery Series – Laparoscopic Colon Surgery, Sept. 22, 2006, Samuel B. Johnson Research Center, Scottsdale


Mayo Clinic Nutrition in Health and Disease, Sept. 28 – 29, 2006, Marriott Minneapolis City Center, Minneapolis, Minn.


A Practical Asthma Workshop for the Primary Care Provider, Oct. 13, 2006, Rochester, Minn.

Third Annual Spit Tobacco Summit, Oct. 16 – 19, 2006, Rochester, Minn.

Geriatric Update for the Primary Care Provider, Oct. 19, 2006, Rochester, Minn.


Prevention for Cardiovascular Disease: Putting Prevention into Practice, Oct. 26 – 27, 2006, Rochester, Minn.

Real Time PCR for the Clinical Microbiology Laboratory, Oct. 26 – 27, 2006, Rochester, Minn.


Current Concepts in Primary Eye Care, Nov. 2, 2006, Rochester, Minn.

OB/GYN Clinical Reviews, Nov. 2 – 3, 2006, Rochester, Minn.

16th Annual Mayo Clinic Symposium on Sports Medicine, Nov. 3 – 4, 2006, Rochester, Minn.

1950s

Robert J. White, (Neurosurgery, 1958) was inducted into the Hall of Fame of the Cleveland City Club on April 5, 2006. Election to the Hall of Fame is based on contributions to the city of Cleveland and to the nation. Dr. White is Professor of Neurological Surgery at Case Western Reserve University School of Medicine in Cleveland.

2000s

Nalini Rajamannan, M.D., was appointed Director of the Center for Valvular heart Disease at the Bluhm Cardiovascular Institute at Northwestern University in February of 2006. Dr. Rajamannan is a graduate of Mayo Medical School and completed a residency in internal medicine at Mayo Graduate School of Medicine during which time she was an internist on the Mayo staff. She also completed her cardiovascular training at Mayo, which included a two year NIH training grant position. In 2000, Dr. Rajamannan completed her training in cardiology and echocardiography at Mayo Graduate School of Medicine. Her current research focuses on how valve disease develops and how to slow its progression and her clinical responsibility is directing the Valvular Heart Disease Center at Bluhm Cardiovascular Institute at Northwestern Memorial Hospital.
**Mayo Update**

**Staff news**

**Roshini Abraham** received the Young Investigator Award from the American Association for Clinical Chemistry.

**Linnea Baudhuin** received the George Grannis Award from the National Academy of Clinical Biochemistry.

**Franklin Cockerill III** received the BD Award for Research by the American Society for Microbiology.

**William Cooney III** was the 10th honored William Burkhalter Professor and Lecturer in Hand Surgery at the Department of Orthopedic Surgery, Jackson Memorial Hospital, University of Miami.

**Steven Eckert** is the editor-in-chief of the International Journal of Oral and Maxillofacial Implants.

**W. Bruce Fye** has been appointed director of the Mayo Clinic Center for the History of Medicine.

**Hossein Gharib** was appointed chair of the Committee on Accreditation and CME for 2006 by the Minnesota Medical Association.

**Robert Kyle** received the 2005 Annual Celgene Career Achievement Award for Clinical Research in Hematology from the American Society of Hematology.

**Mark McNiven** was named chair of the American Cancer Society study section on Cell Biology and Metastasis for 2006.

**John Noseworthy** was named editor of the journal Neurology.

**David Patterson** was elected president of the North Central Section of the American Urological Association for 2006.

**Edith Perez** was elected to a three-year term on the Nominating Committee of the American Society of Clinical Oncology.

**Clarence Shub** was the named the Harold S. Fein Visiting Professor in Cardiology at the University of Miami School of Medicine.

**Anna Kitzmann**, a Mayo Clinic ophthalmology resident, is the recipient of the 2006 Barbara Bush Distinguished Fellowship Award. This award is based on demonstrated humanitarianism, clinical performance and scholarly activity and is given to one current resident each year. Dr. Kitzmann, a graduate of Carleton College, graduated from Mayo Medical school in 2003 and has made medical mission trips to Honduras and Mexico providing free eyeglasses and vision screening. She also has done diabetic retinopathy screening in St.Vincent, Grenadines. Selection for the award is made by a Mayo Graduate School committee. As part of the award, Dr. Kitzmann will travel to Maine during the summer to have dinner with former Mayo Clinic Trustee and First Lady Barbara Bush and President George H.W. Bush in their home in Kennebunkport.

**Fellow, resident and student news**

**Belinda Galeano**, Mayo Medical School, has been recognized by the Academy of Achievement as one of 50 outstanding scholars. Each year the Academy invites 50 men and women of exceptional accomplishment – 30 distinguished previous awardees and 20 new guests of honor – to share their wisdom and experience with 250 of the world’s most outstanding graduate students from more than 40 countries. During the four-day “International Achievement Summit” to be held in Los Angles in June, these young leaders of tomorrow have a chance to meet and discuss issues with eminent achievers from the sciences, business, the professions, sports, literature, entertainment, the military, the arts, and public service. Galeano is currently training at Howard Hughes Medical Institute.

**1940s**

**Eugene P. McManamy**, 93, died on April 14, 2004 in Scarborough, Maine. Dr. McManamy received his medical degree from McGill Medical School in Montreal and completed a Mayo Clinic surgical fellowship in 1942. He received a Masters Degree in surgery from the University of Minnesota. In 1942 Dr. McManamy volunteered for service in the U.S. Army Medical Corps and served
in England until 1945. He was discharged with the rank of Major and was naturalized a U.S. citizen. Dr. McManamy was a fellow of the American College of Surgeons, a diplomate of the American Board of Surgeons and a member of the New England Surgical Association. At his retirement in 1980, Dr. McManamy was chief of surgery at Mercy Hospital in Scarborough where he served as president of the staff. He was president of the Maine Cancer Society, a director of the American Cancer Society and president of the Cumberland County Medical Association.

**B. Marvin Harvard, 91,** died Sept. 13, 2005 in Pine Mountain, Ga. Dr. Harvard received his medical degree from Tulane Medical School and completed a Mayo Clinic residency in Urology in 1949. He retired from his medical practice in 1981 after a career as a surgeon and professor of Urology at Yale Medical School. During World War II, Dr. Harvard was a Major in the U.S. Army Medical Corps, serving first as a surgeon at Fort Benning, Ga. and then in the European Theater.

**1950s**

**John “Jack” Martin McMahon, 89,** died on Oct. 15, 2005 in Birmingham, Ala. Dr. McMahon received his medical degree from Georgetown University. Following an internship at Georgetown, he served in the U.S. military during World War II as a captain in the Medical Corps in the South Pacific. After his military service, Dr. McMahon completed a Mayo Clinic residency in Internal Medicine in 1950. He was instrumental in establishing the Internal Medicine residency for the Baptist Health Systems in Alabama and directed that program for more than 20 years. He chaired the Department of Medicine at Baptist Health System – Princeton, Ala., and, at the time of his death, was clinical professor emeritus at University of Alabama, Birmingham, where he was an active faculty member for 43 years, including 10 years as director of the Arthritis Clinic. Dr. McMahon was elected to a Fellowship in the American College of Physicians in 1955. He was awarded the Benemerenti Medal by Pope Paul VI in 1965 for exemplary service to church, family and community. The medal is the highest honor given to lay members of the Catholic Church. In 1997 he was elected to the American College of Gastroenterology Mastership and received the ACP Alabama Laureate Award in 2005. Dr. McMahon practiced medicine for more than 60 years, specializing in both rheumatology and gastroenterology.

**Rafael Enrique Quinones, 78,** died on Nov. 23, 2003 in St. Clair Shores, Mich. Dr. Quinones completed a Mayo Clinic residency in otolaryngology in 1960. He received a MS degree from the University of Minnesota. Dr. Quinones spent one year at the Marshfield Clinic in Marshfield, Wisc., and five years at the Marshfield Clinic in Fond du Lac, Wisc., before opening a private practice in that community. After 20 years in private practice, he joined the Veteran’s Administration Clinic in Sacramento, Calif. where he was head of the ENT department until his retirement in 1997.

**1960s**

**Darius Shahrokh, 74,** died on March 20, 2005 in Weaverville, NC. Dr. Shahrokh received his medical degree from Tehran University of Tehran, Iran, interned at Woman’s Hospital in Detroit and completed a Mayo Clinic residency in otolaryngology in 1960. He received a MS degree from the University of Minnesota. Dr. Shahrokh spent one year at the Marshfield Clinic in Marshfield, Wisc., and five years at the Marshfield Clinic in Fond du Lac, Wisc., before opening a private practice in that community. After 20 years in private practice, he joined the Veteran’s Administration Clinic in Sacramento, Calif. where he was head of the ENT department until his retirement in 1997.

**William R. “Bill” Smith, 81,** died on Nov. 5, 2005 in Hilton Head Island, S.C. Dr. Smith received his medical degree from the University of Tennessee in Memphis and completed a Mayo Clinic fellowship in Internal Medicine in 1958. He practiced Internal Medicine for more than 30 years in Cleveland, Tenn., before his retirement to Hilton Head and then to Beaufort, S.C. While in practice, Dr. Smith served as chief of staff of Bradley Memorial Hospital and as president of the Mental Health Association of Bradley County. He was a founding member of the Internal Medicine Group in Cleveland, at one time the largest medical group in the state of Tennessee.
Resources to help you stay connected with Mayo Clinic and Mayo Clinic Alumni Association

Mayo Clinic Rochester
200 First Street SW
Rochester, MN 55905
507-284-2511

Mayo Clinic Jacksonville
4500 San Pablo Road
Jacksonville, FL 32224
904-953-2000

Mayo Clinic Arizona
13400 East Shea Boulevard
Scottsdale, AZ 85259
480-301-8000

For Mayo Clinic and health information on the Web:
www.mayo.edu
www.mayoclinic.org
www.mayoclinic.com

Alumni Center Information

Mayo Clinic Alumni Center
507-284-2317
Karen Skiba
Administrator
507-538-0162

E-mail: mayoalumni@mayo.edu

Alumni Relations Coordinators:
Betsey Smith
507-538-1164

Debbie Oscarson
507-538-1663
www.mayo.edu/alumni

The Doctors Mayo Society
Robert Giere
800-297-1185

Physician Referral Information
Rochester 800-533-1564
Jacksonville 800-634-1417
Arizona 800-446-2279

Executive Health Program
Rochester 507-284-2288
Jacksonville 800-634-1417
Arizona 480-301-8088

Mayo Medical Laboratories
800-533-1710
www.mayoreferenceservices.org/mml/

Mayo Clinic MedAir, Mayo One
800-237-6822
www.mayomedicaltransport.com

Regional Visiting Faculty Program
Rochester 507-284-2242
Jacksonville 904-953-2944
Arizona 480-301-7348

Visiting Clinician Program
Rochester 507-284-3432
Jacksonville 904-953-2944
Arizona 480-301-4338

Continuing Medical Education
Rochester 800-323-2688
Jacksonville 800-462-9633
Arizona 480-301-4580
www.mayo.edu/cme/

Employment Opportunities

Mayo Clinic Human Resources
For information about employment opportunities at Mayo Clinic visit:
www.mayo.edu or e-mail: careers@mayo.edu

You will be asked to specify Rochester, Jacksonville or Arizona for employment opportunities.

Mayo Health System
John Shonyo
507-284-9114
www.mhs.mayo.edu

Medical Journal

Mayo Clinic Proceedings
800-707-7040
www.mayo.edu/proceedings
Mayo Clinic Alumni Association

Officers
Scott C. Litin, M.D., Rochester, Minn.
President
David K. Teegarden, M.D., Tyler, Texas
President Elect
S. Mark Laney, M.D., Fort Worth, Texas
Vice President
Eric S. Edell, M.D., Rochester, Minn.
Secretary-Treasurer
T. Paul O’Donovan, M.D., Chicago, Ill.
Past President
Karen D. Skiba, Rochester, Minn.
Administrator

Executive Committee
Kara E. Bliley, Rochester, Minn.
(MGS Representative)
David R. Farley, M.D., Rochester, Minn.
Michael B. Farnell, M.D., Rochester, Minn.
Elena (Ellie) J. Jelsing, Rochester, Minn.
(AMS Representative)
Thomas J. McDonald, M.D., Rochester, Minn.
Roger L. Nelson, M.D., Rochester, Minn.
ex officio
Stephen J. Riederer, Ph.D., Rochester, Minn.
Carl W. Soderstrom, M.D., Peoria, Ill.
Mark J. Truty, M.D., Rochester, Minn.
(MSME Representative)
Daniel W. Wochos, M.D., Scottsdale, Ariz.

Board of Directors 2005 – 2007
David R. Baines, M.D., Anchorage, Ala.
Jamie G. Laventman, M.D.,
Huixquilucan, Mexico
Charles D. McPherson, M.D., Las Vegas, Nev.
Kristina I Ratner, M.D., Kensington, Md.
Elizabeth A. Shuster, M.D., Jacksonville, Fla.
Robert S. Wooten, M.D., Germantown, Tenn.
Thomas W. Daugherty, M.D., Winchester, Va.
Gary Gitnick, M.S., Los Angeles, Calif.
Bernard A. Harris, M.D., Houston, Texas
Melissa A. Meredith, M.D., Bethesda, Md.
Robert J. Spinett, M.D., Rochester, Minn.
Torrence M. Wilson, M.D., Rochester, Minn.
Kenneth H. Brookler, M.D., New York, N.Y.
Nancy L. Ethew, M.D., Plattsburg, N.Y.
Robert P. Kazan, M.D., Chicago, Ill.
Peter H. Layer, M.D., Hamburg, Germany
Robert L. Van Dervoort Jr., M.D.,
Nashville, Tenn.

Editorial staff

Executive Editor — Priscilla Russell
Managing Editor — Michael Dougherty
Art Director — Mary Ayshford
Feature Writers — Renee Berg, Michael Dougherty, Tracy Reed Will
Mayo Update Contributors — Lynn Closway, Erik Kaldor, Lisa Lucier, Robert Nellis
Editorial Assistant — Patricia Voerding
Photographers — Brian Hindal, Joseph Kane, Richard Madsen, Randy Ziegler
Proofreader — Michael McDaniel

Advisory Board — Steven Altchuler, M.D., Ph.D., Eric Edell, M.D., Chair,
Colum Gorman, M.D., Ph.D., Nancy Henry, M.D., Ph.D., Scott Litin, M.D., Patricia Martin, Priscilla Russell, Robert Safford, M.D., Ph.D., Karen Skiba,
Thomas Spelsberg, Ph.D., William Stone, M.D., Dietland Wahner-Roedler, M.D.,
Amy Williams, M.D.

Mayo Alumni Center e-mail address: mayoalumni@mayo.edu
Web site: http://www.mayo.edu
Alumni Association Internet address: http://www.mayo.edu/alumni/

Mayo Alumni magazine is published quarterly and mailed free of charge to physicians, scientists and medical educators who studied and/or trained at Mayo Clinic, and to Mayo consulting staff. The magazine reports on Mayo Clinic alumni, staff and students, and informs readers about newsworthy activities throughout Mayo Foundation. Please send correspondence to: Mayo Alumni, Mayo Clinic, 200 First Street S.W., Rochester, MN 55905; or via e-mail to voerding.patricia@mayo.edu; or telephone 507-284-2450; or fax 507-284-8713.
Send address changes to the Mayo Clinic Alumni Association office at the preceding address or e-mail to mayoalumni@mayo.edu.

Mayo Clinic is committed to creating and sustaining an environment that respects and supports diversity in staff and patient populations.

MAYO CLINIC

200 First Street SW
Rochester, Minnesota 55905
www.mayoclinic.org

© Mayo Foundation for Medical Education and Research (MFMER). All rights reserved.
MAYO, MAYO CLINIC and the triple-shield Mayo logo are trademarks and service marks of MFMER.