Honoring the research collaboration that produced cortisone and a Nobel Prize
Features

Remembering a medical milestone — Mayo Clinic celebrates 250th anniversary of Nobel Prize for cortisone
Mayo Clinic recently celebrated the awarding of the 1950 Nobel Prize in Physiology or Medicine to Mayo collaborators Drs. Philip Hench and Edward Kendall. Their story is one of teamwork, persistence and hard work.

Opening the door to minorities in research – It is their right to participate
Dr. Miriam Marquez coordinates the Office of Diversity in Clinical Research and helps Mayo Clinic in creating culturally sensitive opportunities for minority participation in clinical research. Her work has helped attract larger numbers of minority participants to the research studies conducted by Mayo.

Atlanta in April – the 61st International Meeting
The 61st International Meeting in Atlanta takes place April 19-21 and features a wide range of presentations on the latest innovations in medical specialties to xenotransplantation to the future of healthcare in the United States.

Dr. Audrey Nelson: a quiet pioneer
A profile of Audrey Nelson, M.D., a Mayo Graduate School of Medicine alumna and rheumatologist at Mayo Clinic in Rochester. Dr. Nelson’s quiet leadership skills have landed her top roles in committees at Mayo, the American Medical Association, the Minnesota Medical Association and other influential healthcare organizations.
In a classic example of the Mayo collaborative approach to problem-solving, Drs. Edward Kendall and Philip Hench undertook the long and arduous task of producing and testing Compound E. The result was cortisone, a drug that revolutionized medicine and garnered the team a Nobel Prize.
“We are proud of the achievements of these two colleagues, who revolutionized medicine and affected the lives of millions of people around the world. Even today — 50 years later — cortisone continues to be used in all aspects of medical care. It is a once in a lifetime opportunity for us to recognize our colleagues, Drs. Hench and Kendall, for what they were able to do and the legacy they have left behind.”

— Dr. Harvinder Luthra
Chair, Division of Rheumatology
Mayo Clinic Rochester
Remembering a medical milestone:

Mayo Clinic celebrates 50th anniversary of Nobel Prize for cortisone

Fifty years ago, sufferers of rheumatoid arthritis faced a grim prognosis. The chronic and progressive disease of the connective tissue causes severe arthritis in the joints and can result in serious deformities and disabilities. Not uncommonly, the disease once left its victims wheelchair bound.

In the 1940s, Edward Kendall, Ph.D., and Philip Hench, M.D., of Mayo Clinic discovered a naturally occurring substance that finally offered aid to the countless people around the world who struggle with rheumatoid arthritis. The substance was cortisone, and for their discovery, Drs. Kendall and Hench received the 1950 Nobel Prize in Physiology or Medicine.

Wartime rumors

During World War II, it was rumored that Luftwaffe pilots were given extracts from adrenal glands, giving them the ability to fly at higher altitudes. While the rumors were eventually dispelled, they set off a rush in the scientific community to better understand the substances produced by these tiny glands. In fact, the U.S. government made the study of adrenal hormones one of the nation’s top scientific priorities.

When the government called upon pharmaceutical companies and medical centers to start up research, it was already in progress at Mayo Clinic. In the 1930s, Dr. Kendall had isolated six hormones from the adrenal glands. He identified the compounds by the letters A through F.

Dr. Kendall was a tireless researcher, who was described by a contemporary as “the man who celebrated Christmas Day and, indeed, every holiday in his laboratory.”

Meanwhile, Dr. Hench was searching for a treatment for his countless patients with rheumatoid arthritis. Dr. Hench joined Mayo Clinic staff in 1926 as the center’s first rheumatologist. In 1929, he made the observation that some patients’ symptoms mysteriously improved when they experienced jaundice, were pregnant or recently had surgery. He hypothesized that these conditions prompted the release of a natural anti-rheumatic substance. He called it “Substance X.”

Dr. Hench approached Dr. Kendall about his work with the adrenal cortex, wondering if any of the six hormones might be helpful in the fight against rheumatoid arthritis. The two conferred and decided that Substance X was most likely a hormone and possibly a steroid. In January 1941, Dr. Hench made a notation in his notebook: “Try Compound E in rheumatoid arthritis.”

A complex chemical problem

When adrenal cortex research became a government priority, more funding was available to continue Dr. Kendall’s research. His first step was to try to synthesize enough Compound A to perform tests. It took three years for him to refine the process. The following year, Merck & Co., a New Jersey pharmaceutical firm, had prepared enough to support a clinical trial.

Simultaneously, a young chemist at Merck, Lewis Sarett, Ph.D., was given the task of learning how to synthesize Compound E. A senior chemist remarked at the time, “This young man thinks he can do what some of the world’s best chemists have been trying to do for years without success. It is one of the most complicated and involved chemical problems that the mind of man has ever undertaken.”

Regardless of this skepticism, Dr. Sarett, working with Dr. Kendall’s team, developed a complicated, 36-step process to produce a small sample of Compound E. They made only 15 milligrams of the hormone from the bile of 2,500 cows.
Initial disappointment

In 1946, results of the tests on Compound A were available, and they were a disappointment. The war was over, the Luftwaffe rumors were known to be false and interest in adrenal research was low. But Dr. Kendall and Merck continued their work. At the time, even Merck executives were reluctant to continue pursuing the project.

According to Merck’s scientific director, “We were inclined to think it would be pointless to undertake to make Compound E.” Compound E differed from the disappointing Compound A by only one oxygen atom. Ultimately, he decided that although it was “a gamble, there just might possibly be a use for E.”

“We had reached the end of the road. The answer had to be yes or no.”
— Dr. Edward Kendall

The news of their Nobel Prize first reached Drs. Kendall and Hench via this Western Union telegram received on Oct. 26, 1950.
By 1948, Drs. Kendall and Sarett had refined the production process sufficiently to yield enough Compound E for clinical testing. The batch was carefully divided between three chemists and three clinical investigators for use. Drs. Kendall and Hench and a Mayo Clinic endocrinologist shared the Mayo allotment.

Unfortunately for Dr. Hench, his share wasn’t enough to treat even one rheumatoid arthritis patient. The endocrinologist’s portion was slated for testing on Addison’s disease and diabetes and was, therefore, unavailable.

At the time, Dr. Kendall was vacationing at a rural cottage without a phone. He received a message from Dr. Hench and trekked to a nearby farm to make a return call. After 45 minutes on an old crank telephone, he promised to get enough Compound E to treat a single patient — either from Merck or his own laboratory.

First use

Merck demanded written justification for Drs. Hench and Kendall’s surprising request. It was a difficult letter to write. There was little evidence to suggest that Compound E would have any effect on rheumatoid arthritis. In Dr. Hench’s words, “The reasoning behind this joint decision was fragile.”

In the letter, the team told Merck that they had an ideal patient for the trial and promised quick results. “If any compound is of real significance in rheumatoid arthritis, we would expect to see some results within a very few days.”

Merck allotted five more grams to the Mayo Clinic team.

Dr. Hench’s patient was a 29-year-old woman (“Mrs. G.”) who was being treated at Saint Marys Hospital in Rochester, Minn. Clinicians had tried to induce a mild case of jaundice, without any effect. When doctors tried to discharge her from the hospital, she refused to go, saying that she’d come to Mayo Clinic for relief and wasn’t leaving until she had it.

On Sept. 21, 1948, Mrs. G. received the first injection of Compound E. Dr. Kendall recalled that in light of the failure of Compound A, “we had reached the end of the road. The answer had to be yes or no.” Any future study into the use of Compound E for rheumatoid arthritis depended solely on Mrs. G’s reaction.

Mrs. G. received 100 milligrams of the compound each day. On the first day she was bedridden with stiffness and pain. On the evening of the second day she reported feeling a little better. But on the morning of the third day, doctors observed a phenomenal change. She was able to easily roll over in bed and was much less sore and stiff. Her strength and appetite were greatly improved, and on day four, doctors found her exercising by lifting her arms over her head.

Mrs. G.’s doctors informed Dr. Hench, who was about to leave for a three-month trip to London. The visit to Mrs. G. was well worth the delay. Dr. Hench warned his colleagues to keep mum about the project in his absence, even asking them not to use the term “Compound E” in their correspondence.

Mrs. G. continued to improve. Just a week after the trial began, she went shopping for three hours in downtown Rochester and proclaimed, “I have never felt better in my life.” Doctors tried to lower the dosage unbeknownst to their patient, but the symptoms quickly returned. It seemed that their original dose was the correct one.

Medical revolution

Scientists at Merck were informed of the news and took extreme security measures. “It was a revolutionary thing,” Dr. Sarett recalled, “something for which there would be a great demand when the news was released.”

Merck was deeply concerned about meeting this demand. According to Dr. Kendall, Compound E was “the most complicated compound ever made for medical use.” No one had ever produced such a complex substance on a large scale.

Doctors at Mayo Clinic expanded the trial to include more patients. James Carlisle, M.D., medical director of Merck, traveled to Rochester to observe patients two and three. Although he was skeptical, he eventually became convinced that Compound E had real benefit.
In all, 14 patients were studied over seven months, and they all showed great improvement. Patients became physically active once again. They regained their mental abilities and were freed from depression, although, some had side effects such as mood changes and unwanted hair.

Merck and Mayo Clinic struggled to produce enough Compound E to keep the trial going. Eventually they refined the production process and increased output 100-fold.

Results were so good that Merck convinced the Mayo team that they could not hope to continue the work in secret. In April of 1949, Drs. Kendall and Hench quietly presented their results at the regular Wednesday night meeting of scientific staff at Mayo Clinic.

The press was not informed, but the top science reporter from The New York Times appeared in Rochester asking for a copy of the presentation. He was told to wait until after the meeting.

The presentation was made to a standing room only crowd. People who couldn’t find room to stand perched on windowsills or listened from the lobby. That night, the Times reporter had his scoop. The breakthrough was immediately compared to the discoveries of penicillin and insulin. Life Magazine photographed the doctors behind the new “miracle drug.”

To avoid confusion with Vitamin E, Drs. Hench and Kendall renamed Compound E “Cortisone.”

Merck knew that they could not make enough cortisone to treat the millions of arthritics who needed it. The search began for a synthetic substitute. To aid the process, Merck built a $7 million facility for research and openly shared its patents with any pharmaceutical company wanting to make the new drug.

The worldwide scientific community embraced the accomplishment of Drs. Kendall and Hench, and in 1950 they were awarded the Nobel Prize in Physiology or Medicine. They shared the prize with Tadeus Reichstein, Ph.D., of Switzerland, who had simultaneously isolated the hormones of the adrenal cortex. The newly awarded laureates at Mayo shared their large cash prize with colleagues and used some of the proceeds to send the nursing supervisor in the arthritis wing, Sister Mary Pantaleon, to Rome for an audience with the Pope.

Today cortisone is used to treat disorders ranging from asthma to cancer, in addition to its continued use as an anti-rheumatic. The discovery and application of cortisone epitomizes the spirit of teamwork that has guided doctors at Mayo Clinic since its inception. “In our opinion,” said Dr. Hench, “the awards we received belong truly to all the men and women of the Mayo Clinic…”

— Dr. Philip Hench

“In our opinion, the awards we received belong truly to all the men and women of the Mayo Clinic…”

— Chrystal O’Hanlon

Thomas Williams
More than 50 years ago, Edward Kendall, Ph.D., and Philip Hench, M.D., achieved their dream of helping patients debilitated with rheumatoid arthritis by administering cortisone. At that time, they could only dream of the impact their contributions would have on generations to come. While the discovery led to relief for thousands of patients able to return to more active and more enjoyable lives, their tireless efforts helped form a foundation of research that has made possible many new discoveries throughout the years.

To honor the men and women who worked together to make cortisone possible, Mayo Clinic hosted a celebration of the Nobel Prize anniversary in August with public and private events. “It is a rare opportunity to celebrate our rich heritage and reflect on the past,” says Harvinder Luthra, M.D., chair of the Division of Rheumatology at Mayo Clinic in Rochester. “This occasion lent itself to celebrate the institution that fostered the development with an atmosphere of inquiry. Two scientists from opposite backgrounds worked toward a common goal; two institutions with similar principles and goals came together to revolutionize medicine.”

The celebration began with a semi-formal dinner on Aug. 11 to welcome guests and recognize the individuals, families and personalities who participated in the development of cortisone. Physicians attended an international education symposium devoted to the use of cortisone in rheumatoid arthritis and other diseases, and gained a greater understanding of the effects of cortisone and its future applications. The community and Mayo Clinic employees gathered for the public celebration on the evening of Aug. 13, to watch the Mayo-produced “History of Cortisone” video, peruse historical displays and view a reenactment of the Nobel Prize presentation. Later in the week, the Department of Rheumatology hosted a faculty dinner to conclude the celebration festivities.

— Jennifer Goodman
Somali women in traditional robes tour a Rochester supermarket in the company of a dietitian and a translator, learning how to shop for their families in the unfamiliar landscape of an American grocery store. Their guide? Miriam Marquez, Ph.D.

Her goal? To build relationships and trust by giving a friendly face to what recent immigrants might consider an imposing and impersonal medical center. Dr. Marquez coordinates the Office of Diversity in Clinical Research, which assists Mayo Clinic scientists in creating culturally sensitive opportunities for minority participation in clinical research.

The office functions within the Center for Patient Oriented Research at Mayo Clinic Rochester. Dr. Marquez describes it as “a response to the increasing complexity of patient-oriented research, which requires a more integrated infrastructure and sensitivity to subjects’ cultural backgrounds and traditions.”

Opening the door to minorities in research — It is their right to participate

You can’t possibly force information gleaned from the middle fingers to fit the case of the thumb or the small finger, she says, yet that’s what research has tried to do in the past. Using data from majority populations to create programs and treatments for minorities is like using your third finger to size a ring for your thumb.

The need for accurate information is particularly urgent when you realize that heart disease, cancer and diabetes rank first, second and third as the major causes of death among minority populations. Yet these same groups have the lowest representation in clinical research projects aimed at preventing and treating those same diseases.

Research about the impact of diet on diabetes or heart disease among Caucasians can’t translate to these groups because there are more differences than similarities.

Compounding this problem are myriad subgroups within every minority, each with unique characteristics. Dr. Marquez is Caribbean Hispanic. As she explains in her get-down-to-business manner: “We must study all populations because it is their right.”

Non-traditional approach

To understand the dynamics of recruiting minorities in research, it helps to look at how scientists seek participants for clinical studies. When Mayo’s Institutional Review Board (IRB) approves a research project, researchers agree on a set of criteria for participants in the study. Traditional recruitment methods include mailings, news releases to the media and contact with referring physicians.

These approaches, however, often bypass key segments of the population. Mailings don’t reach people who move frequently. Language can be a barrier, which precludes access through the mainstream news media. In addition, some minority groups won’t seek medical care except in emergencies, so they have no established relationships with referring physicians who could recommend their participation.
Dr. Miriam Marquez discusses variations in recruitment strategies with cultural advisors. Udbi Wallin works with the Somali community, Nga Edmonson with Vietnamese and M. Clara Ortiz Ruiz with Spanish-speaking groups. The work done by these advisors is crucial to the efforts of Dr. Marquez and the Office of Diversity in Clinical Research as they strive to increase participation of ethnic minorities in research programs at Mayo Clinic. (Clockwise from lower left: Wallin, Marquez, Edmonson, Ortiz Ruiz)
How, then, do researchers contact these groups? That’s where Dr. Marquez and her office come into the picture at Mayo Clinic. Minority participation is not just desirable — it’s essential. In the early 1990s, the National Institutes of Health (NIH) made inclusion of minority populations a requirement for studies that receive federal funding. Regulations stipulate that women and members of minority groups, and their sub-populations, must be included in all NIH-supported biomedical and behavioral research projects involving human subjects.

Mayo recognizes the importance of this mandate and actively seeks to meet the need. Good fortune threw Mayo and Dr. Marquez together in 1995, and since that time she has brought her wide experience to bear on the issue with excellent success.

In 1993, only 2.8 percent of participants in clinical research in the General Clinical Research Center at Mayo Rochester were members of minority groups. By 1997, that number was 23 percent. This increase is particularly impressive when you realize that the population of Rochester and surrounding Olmsted County is predominantly Caucasian and the source of the landmark work in osteoporosis since 1980,” says B. Lawrence Riggs, M.D. “We were still required to include minorities in our studies. We were having difficulty attracting minorities to participate in studies, so Dr. Marquez came to consult for us initially and was very successful. She has been helpful in many ways.”

The study on osteoporosis by Dr. Riggs, an investigator in bone and mineral research, was greatly aided by the addition of a large number of Vietnamese, Laotian and Cambodian participants who live in and around Rochester. It surpassed the national average for minorities in research studies. Study findings revealed differences in bone density from one subculture to another and reemphasized that “Asians” should not be considered a homogeneous population group. The study documented a substantial prevalence of osteoporosis among Southeast Asian women and men that justifies increased attention to this problem on the part of clinicians who care for these ethnic groups.

While developing the minority studies, Dr. Riggs also learned many things about the different cultures and how to address their concerns in future studies. For instance, many of the minority groups involved in the studies have come from countries torn by war, so they have been through some bad times and are very apprehensive. Dr. Marquez’s understanding of their cultures and her work with cultural advisers helped to bridge the gap.

“We were having difficulty attracting minorities to participate in studies, so Dr. Marquez came to consult for us initially and was very successful. She has been helpful in many ways.”

— B. Lawrence Riggs, M.D.
Reaching people where they live

How does Dr. Marquez generate such interest and willingness to participate?
First, she reaches out where minorities live and develops trust. She works with cultural advisers who are respected members of the minority community. These liaisons introduce Dr. Marquez to the community and provide reassurance that it is safe to work with her and Mayo Clinic. As Dr. Marquez puts it: “Minority populations sense when people are accepting of them and they know immediately if you are not.”

The grocery shopping expedition is an example of outreach with a dual purpose. The programs she designs not only serve Mayo’s needs, but also provide participants with information, education and skills that are helpful in their new setting. Programs reflect individual groups, with materials and procedures that are appropriate for each community.

Participants get transportation to the medical center. A translator is available to ensure they are comfortable with the research questions and materials. During studies concerning bone density and osteoporosis, for example, participants learn how to ensure strong bones and avoid the problems of osteoporosis in old age. Sometimes education is as basic as showing the participants what a milk carton looks like. (Immigrants from developing countries might never have had the luxury of purchasing pasteurized milk in cardboard or plastic cartons.)

At other times, education involves creating a culturally safe environment. For example, Somali women cannot wear pants in public, so they can’t exercise at health clubs.

A love of people

Possessed of a mischievous laugh and a twinkle in her eye, Dr. Miriam Marquez has an engaging manner that tells you immediately how much she loves people.

Her credentials include a master’s degree in public administration from the University of Puerto Rico and a Ph.D., in health services administration and research from the University of Minnesota.

Dr. Marquez has worked in a variety of public health programs in her native Puerto Rico, Spain and Southeast Asia, including extensive work with AIDS prevention through the Puerto Rico Department of Health. She held posts with the University of Puerto Rico and the University of Cadiz, Spain, prior to coming to Mayo.

During 1995, while on sabbatical from the University of Puerto Rico, she worked at Mayo as a Visiting Scientist, and as a private consultant after her sabbatical. Mayo colleagues recognized that her work with minority populations was vital. In July 1999, she was appointed coordinator of the Office of Diversity in Clinical Research in the Center for Patient Oriented Research.

As you talk with Dr. Marquez, you easily see her passion for her work. She is articulate and interested in everything around her. She brings to her work superb command of details and vast experience with people of many cultures. These qualities, coupled with her vitality and commitment to equity among people, make her a valuable member of Mayo’s research team.
In a temporary trial, Dr. Marquez arranged for the local Red Cross (an organization Somalis are comfortable with) to close its doors during education classes for Somali women. Following a basic health lecture, the women enjoyed an aerobic exercise class while Somali youth took care of their children. Such initiatives can be costly and time-intensive, but the effort is worthwhile when more people respond.

The future of medical progress

Research is a primary driver of modern medicine. It functions hand-in-hand with medical education and patient care to form the engine that moves medicine forward.

The importance of medical research is the very quality that causes it to be so fraught with thorny issues like equitable representation of minority populations. It is in keeping with the mission and dedication of the Mayo Brothers that Dr. Marquez and her colleagues work to further the efforts of the Mayo research community. As a result, all people will benefit.

— Judith Samson

Institutional Review Boards protect patient safety

How does the scientific community protect people who participate in research? In the early days, there were no safeguards, and occasionally the zeal of the researchers overcame their humanity.

Research today, however, is regulated with many safeguards to ensure patient safety. In response to abuses during World War II, the Nuremberg Code was written, setting forth universal principles including voluntary consent and avoidance of unnecessary suffering. According to the code, benefits must equal or outweigh risks, only qualified persons may conduct experiments, and participants may end their involvement at any time.

Other organizations have developed additional guidelines over the years. In 1974, the U.S. government issued its first regulations for research conducted in this country. (Prior to 1974, there were ethical guidelines but not legal obligations.) Numerous additions to these regulations have been enacted since then. Today, a formal Code of Federal Regulations governs research activities throughout the country.

Mayo Clinic established policies for research almost a decade before the first government regulations were enacted. In 1965, Mayo created the “Internal Medicine Study Section,” which reviewed research protocols. The General Clinical Research Center (GCRC) at Mayo Clinic is one of 74 GCRCs in the country, with nearly 30 years of funding history from the National Institutes of Health.

As research has grown over the years, Mayo’s continued vigilance is evident in its robust Institutional Review Board and the recent creation of the Center for Patient Oriented Research.
With topics ranging from xenotransplantation to physicians working in outer space, members of the Mayo Medical Alumni Association will have the opportunity to hear a wide variety of talks when they come together April 19-21, for the 61st International Meeting in Atlanta. The program will include three days of general session presentations on advances in medical and surgical practice. Twenty medical specialty sessions will round out the program.

Former Red Cross President Elizabeth Dole will talk about “An America We Can Be,” while Bernard Harris, M.D., M.B.A., (Internal Medicine ’85), vice president of SPACEHAB, Inc. and a former NASA astronaut, will present the Judd-Plummer Lecture, titled “The Physician of the Future: Space and Beyond.” In addition, John Hardman, M.D., (Psychiatry ’71), executive director of the Carter Center in Atlanta, will present “The Carter Center: Waging Peace, Fighting Disease, Building Hope.”

General session meetings will run all three days from 7:30 a.m. to 1 p.m., and the medical specialty sessions will run concurrently with these sessions on Friday and Saturday.

General program speakers

Gerald Bechamps, M.D., (Surgery ’69), president of the Mayo Medical Alumni Association, will welcome alumni on the first full day of events, Thursday, April 19. Michael Wood, M.D., (Orthopedics ’74), president and chief executive officer of Mayo Foundation, will follow with an update on Mayo.

Hugh Smith, M.D., Denis Cortese, M.D., and Michael O’Sullivan, M.D., board chairs for Mayo’s three sites, will provide updates on Mayo Clinic Rochester, Jacksonville and Scottsdale, respectively.

The Raymond Pruitt Lecture will be delivered by John Stobo, M.D., president of the University of Texas Galveston Branch, and Linda Blank, vice president for Clinical Competence and Communications for the American Board of Internal Medicine. Dr. Stobo’s talk is titled “Professionalism in the 21st Century: Reaffirming the Social Contract.” Blank’s talk is titled “Professionalism In Medicine: Is It Time For A New Social Contract?”

Other presentations during the meeting will include physician development and mentorship; nanotechnology; advances in xenotransplantation; and cybernetics.

Social program

Officers of the Mayo Medical Alumni Association will host an opening reception on Wednesday evening, April 18. All alumni and their guests are welcome to stop by to make friends and renew acquaintances.

On Thursday, April 19, families are invited to enjoy an hors d’oeuvres buffet at the Fernbank Museum of Natural History. This is an opportunity to view dinosaurs and other exhibits while walking on 150 million year old fossilized limestone.
The meeting will conclude on Saturday, April 21, with the President’s Dinner and Dance — an evening of star-studded elegance at The Fox Theatre.

Other events

The Doctors Mayo Society:
On Friday evening, April 20, members of The Doctors Mayo Society will convene for their annual business meeting and dinner program, featuring guest speaker W. Thomas Johnson Jr., president of CNN Television and trustee, Mayo Foundation. For membership information, please contact Barbara Plathe, Mayo Clinic Development Department, at 507-284-4789.

Mayo Medical School:
Mayo Medical School will host a reception for alumni and faculty on Friday evening, April 20.

Retirement and Estate Planning:
The Development Department of Mayo Foundation will sponsor a series of practical, hands-on retirement and estate planning sessions. These popular programs are tailored for the unique needs of physician families, with a special emphasis on “what every doctor’s spouse should know.”

More information
Registration materials have been mailed to all alumni. Please contact the Mayo Alumni Center, if you did not receive them.

Mayo Medical Alumni Association
Mayo Clinic
200 First Street SW
Rochester, MN 55905
507-538-1164
Fax: 507-284-0999
alumni.affairs@mayo.edu

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Dr. Audrey Nelson: A quiet pioneer

A leader is best
When people barely know she exists,
When her work is done, her aim fulfilled,
They will say:
We did it ourselves.
— Lao - Tzu

I’m basically boring,” says
Audrey Nelson, M.D.
On the face of it, you might agree
with her. She is a soft-spoken,
unassuming woman who wears a
sensible hairdo, sensible shoes and
sensible clothes. Except for one year,
she’s lived all her life within 100
miles of her birthplace. Down to earth
is how friends describe her. She likes
cats, sailing and strolling at the beach,
and she’s taken a vacation with her
parents. Ho hum...

But appearances can be deceiving.
This quiet woman helped make some
of the most momentous decisions in
Mayo Clinic’s history. She headed an
effort to reform the power structure
of the American Medical Association.
She’s testified before a congressional
committee and championed women’s
issues at male-dominated institutions.
Friends call her a bulldog and a tiger
who never gives up and is never
intimidated.

The fact is, Dr. Nelson may be the
most effective leader that you’ve
never heard of. Her quiet, behind-the-
scenes style of leadership doesn’t get
headlines. But it has earned her
accolades and progressively greater
responsibilities at every organization
she’s been part of, including Mayo
Clinic, the Minnesota Medical
Association, the AMA, the American
Medical Group Association and the
American College of Rheumatology.

How she developed her leadership
abilities is a classic case of preparation
meeting opportunity. “Opportunities
came up, and I was the right person in
the right place at the right time,” she
says.

The right time was the early 1970s
when Dr. Nelson, an Austin, Minn.,
native and University of Minnesota
Medical School graduate, joined the
Mayo Clinic staff after finishing
rheumatology training in the Mayo
Graduate School of Medicine. She was
the only woman in the Department of
Medicine and one of only a few women
on the medical staff.

“Affirmative action had just come
in,” Dr. Nelson recalls, “and they
needed a woman on the new Equal
Appointment and Employment
Opportunities Committee. I was asked
to join it and then to become chair. It
was a good opportunity to deal with a
variety of issues that cut across the
institution. I got to see who did what,
and I got some visibility. I probably had
a style that people thought would be
effective, so I was asked to do other
things. Leadership kind of progressed
from there.”

In 1976, she was the first woman
elected to the Officers and Councilors of Mayo Clinic, the representatives of the medical staff who advise Mayo’s governing board. In that role, she sat with the Board of Governors for a year. She served as chair of the Medical Relations Committee and on the Education Committee and the Staff Development Committee. In 1982, she was elected to the Board of Governors, and in 1989 became vice-chair. Both were firsts for a woman at Mayo.

She found herself in very turbulent waters on the board compared to the one she had sat with six years earlier. “I remember back in 1977 there was a huge discussion on how the letterhead should look. It lasted for hours. And the board spent a lot of time discussing new appointments to the staff. In those days, if we needed more money, we just raised the fees. I remember Bob Roesler (the chief administrator) cautioning against raising fees too much — that we didn’t need to have any more than we needed to have.”

But the world had changed. Managed care was having a greater impact; reimbursement was declining. The board was forced to grapple with how these changes would affect Mayo and what to do.

“At the time, it looked like patients might be restricted from coming to Rochester and we shouldn’t put all our eggs in one basket.” Lots of options were explored before the decision was made to diversify Mayo’s business — to branch out to other locations and other activities.

“Those decisions were huge for Mayo, and we really didn’t understand — how could you — the magnitude of the changes that would take place. But, like the idea from change management, we felt like we were standing on a burning platform — you had to decide if the risk of not doing anything was worse than doing something.”

Ray Lee, M.D., served on the board with Dr. Nelson at that time. He remembers her tough questioning. “She always tried to get to the core of an issue and she demanded hard answers. She was not snowable, and once she made up her mind, she stuck with it. She is not wishy-washy. She also isn’t afraid to stand up for her opinions. If she was a minority of one in a discussion, that wouldn’t bother her.”

Other noteworthy issues that Dr. Nelson dealt with during her board tenure were adjusting to requirements of the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) when it decided to put some teeth into its reviews and increasing maternity leave for medical staff. “We went from doing nothing to starting to look at special needs and trying to be flexible,” she says.

What is it about Dr. Nelson that makes every organization want her for their leadership team?

These are the leadership qualities she says she brings to the table:

- **Well organized planner:** “I like to think things through like a chess game and project what the ramifications of a decision will be down the line.”
- **People reader:** “I am pretty good at sensing where people are coming from and being sensitive to their issues. What you see on the surface and what is behind it are not always the same.”
- **Communicator:** “I like to communicate often and keep everything above board. What you see is what you get with me.”
- **Politician:** “I don’t like making waves and I’m willing to compromise. I’m not a battler. I’m a behind-the-scenes mover and shaker.”
- **Believer in consensus:** “The end product is better if everyone affected by an issue is allowed to participate and is valued for what they bring to the table. When you let a group work through it the best ideas will come out, and the group product will be better than anything one or two people could come up with.”
Dr. Nelson says she learned her leadership skills mostly by watching and self-teaching. “Most of these things are not taught didactically,” she says. “If it’s one of your God-given talents, then you can learn. If it’s something that you can’t do, then you’re never going to be able to learn it.

“At Mayo, we are particularly blessed in learning these skills, which gives us a leg up in working in other organizations.”

Dr. Nelson’s contributions extended beyond Mayo’s walls. She headed up the Zumbro Valley Medical Society in 1983 and helped turn it from a chair-led to a committee-led organization. She became a delegate to the Minnesota Medical Association and served on its Board of Trustees. Retired orthopedic surgeon Ed Henderson, M.D., worked closely with Dr. Nelson in these activities. “She was a great leader because you knew that she would get into a problem and make a real attempt to solve it,” he says. “She is a tiger when she gets hold of something. She never gives up.”

She was Mayo’s representative to the American Medical Group Association (AMGA) for many years, was the first woman to serve on its Board of Directors, and the first woman to chair the board in 1997. Don Fischer, executive director of the AMGA, states that Dr. Nelson was a “stabilizing force” for his organization in helping them through a difficult merger. “She is one of the most astute political thinkers I know,” he says. “She has the knack for knowing where people are coming from and so is able to defuse issues. She also is able to work with others to prioritize issues and focus on what is really important and then rally the resources to make that happen.”

In 1997, the AMA and Sunbeam Corp. announced a “co-branding” program through which the AMA seal would appear on a line of home healthcare products. The announcement was greeted by a firestorm of protest by AMA members and the public. In short order, the deal was scrapped and a number of top AMA executives lost their jobs. AMA House of Delegates members demanded an inquiry into the management and governance of the organization. To lead that inquiry they named Dr. Nelson.

Dr. Nelson had been a delegate to the AMA from Minnesota since 1985 and had chaired its Advisory Committee on Group Practice. But the Ad Hoc Committee on the Structure, Governance and Operations would be by far her greatest challenge.

“I think they named me because I couldn’t be accused of trying to further my own objectives,” she says.
"I had no aspirations for power. My only objective was to help the organization function better."

With the help of a consulting firm, the committee spent a year analyzing the issues and gathering data. Dr. Nelson delivered the final report, with 600 pages of appendices, to the House of Delegates at the AMA meeting in Honolulu in December of 1998. "The AMA Board of Trustees was not pleased with some of the things we recommended," says Dr. Nelson. "But we got a standing ovation from the delegates and approval of most of the 36 recommended changes."

Nancy Nielsen, M.D., an internist in Buffalo, N.Y., and current vice-speaker of the AMA House of Delegates, was a member of the Ad Hoc Committee. She says, "We knew the conclusions would not be popular. Our job was to identify all the issues, provide data to support our conclusions and convince the delegates that the conclusions were legitimate. We needed this to be deliberate and based on data, not emotions. Audrey was the perfect person for this. She was calm, cool and competent, very fair and not easily intimidated."

Mayo physiatrist Gail Gamble, M.D., was at the meeting and said "Audrey Nelson’s integrity carried the day. To a person, her opinion is respected."

Dr. Nelson says that the report "was not my doing at all. I just kept the group on track."

Dr. Nelson just finished a term on the Board of Directors of the American College of Rheumatology. She is currently chairing its group on leadership and organizational effectiveness and is leading the Strategic Planning Committee.

For now, Dr. Nelson’s leadership talents are focused largely on public policy issues for Mayo and other group practices through the AMGA.

She says the biggest issue today is trying to preserve the personal quality of medical care, for both the patient and the care giver, while at the same time finding ways to pay for it. "It’s a huge challenge," she says. "Mayo is doing a better job than anyone else in this, but it is a constant struggle."

First woman councilor; first woman on the Board of Governors; first Mayo woman on the Board of Trustees — Dr. Nelson has broken ground for women in leadership at Mayo. Dr. Gamble says women at Mayo today all owe a debt of gratitude to her. "Her competence has opened doors to opportunities for us all," she says.

What does Dr. Nelson think about being a pioneer? "It’s nice," she says, "but after a while you hate to talk about being the first this or that. It’s nice that things have evolved so that it’s not a big deal any more. I was lucky to come along at a time when doors were opening for women."

"When I was a medical student, it was a big deal that women were there. Less than 5 percent of students were women. Now it’s 50 percent. When I was there you got recognized for whatever you did, good or bad, because you were so visible. You wanted to be sure to do well because it reflected on all the women who would come after you. That added some pressure, I suppose, although I must say I didn’t feel the pressure. I just dumbly went on doing whatever I was doing and enjoyed it.

"I went into medicine because it was what I wanted to do. That is what has directed my choices all along the way. Things evolved as opportunities arose and pathways diverged. It was not strategically planned, I can tell you."

— Michael O’Hara
Mayo Foundation Board of Trustees honors physicians with named professorships

Two Mayo Clinic physicians were recently honored with Mayo Medical School named professorships.

The Mayo Foundation Board of Trustees awarded Moses Rodriguez, M.D., a Mayo Clinic neurologist and researcher, the Mildred A. and Henry Uihlein II Professorship in Medical Research. This professorship was established in 1984 by Mr. and Mrs. Henry Uihlein II of Indian Wells, Calif., and Lake Placid, N.Y. Bruce Zimmerman, M.D., a Mayo Clinic endocrinologist, was named the recipient of the George M. and Edna B. Endicott Professorship in Medicine. Mr. and Mrs. George M. Endicott of Grosse Point Farms, Mich., established the professorship in 1977.

Dr. Rodriguez received his medical degree from Northwestern University and completed his residency at Mayo Clinic. He was a neuropathology fellow in the Department of Pathology at the University of California at San Diego in La Jolla, Calif., and the Department of Immunopathology at Scripps Clinic and Research Foundation in La Jolla, Calif. Dr. Rodriguez joined the Department of Neurology at Mayo Clinic Rochester in 1983 and became a member of the Department of Immunology in 1985. He currently is a professor of neurology and immunology at Mayo Medical School.

Dr. Zimmerman received his medical degree from the University of Minnesota. He completed his internship at Parkland Memorial Hospital in Dallas and his residency at Mayo Clinic. Dr. Zimmerman joined the staff of Mayo Clinic in Rochester in 1976. He currently is a member of the Department of Internal Medicine and a professor of medicine at Mayo Medical School. He also has served as president of the American Diabetes Association.

Researchers find new, more accurate way to detect colorectal cancer

Mayo Clinic researchers have investigated a new, non-invasive test that was 91 percent sensitive for detecting cancer throughout the colon, according to a study released in October in the journal *Gastroenterology*.

Although about two years away from becoming widely available for public use, Mayo Clinic researchers believe this new method could significantly change the way screening for colorectal cancer is done. Most importantly, they think this new detection method may save thousands of lives annually.

Requiring a stool specimen, the new detection method involves analyzing DNA that’s shed from the surface of colorectal tumors and excreted in the stool. Measuring specific DNA abnormalities that are unique to pre-cancerous polyps and early stage cancer results in high accuracy of detection.

“This new, non-invasive test safely and accurately detected curable-stage cancer of the colon and rectum,” says David Ahlquist, M.D., a Mayo Clinic gastroenterologist and lead researcher on the study. “Furthermore, the method detected pre-cancerous polyps. That’s important because by detecting polyps and endoscopically removing them, we know that colorectal cancer can be prevented.”

The next step is for the DNA colorectal cancer test to undergo another phase of clinical trials, scheduled to begin in January.

According to Dr. Ahlquist, the DNA colorectal cancer test shows promise for supplanting the fecal blood test, an often used but confounding screening test for finding blood in the stool.

“A major problem with the fecal blood test is that as many as 5 to 10 percent of the screened individuals have a false-positive, or incorrect, reading from the test,” says Dr. Ahlquist. “This means that one in every 10 to 20 people screened has to unnecessarily undergo a colonoscopy, a costly and invasive medical procedure, to further evaluate the colon.

“Another problem with the fecal blood test is that blood in the stool is not present with many early stage colorectal cancers, nor with the vast majority of polyps,” he adds.

Dr. Ahlquist and Mayo Clinic researchers collaborated with scientists at EXACT Laboratories in Maynard, Mass., to conduct the clinical pilot study. The EXACT scientists developed the technology for this new detection method, which includes novel techniques for recovering...
human DNA from stool and for measuring a number of tumor-specific DNA alterations.

The initial double blind study involved analysis of DNA in stool specimens from 61 patients. Unknown to the technicians performing the test, 22 of the patients had been previously diagnosed with colorectal cancer, 11 of the patients had large pre-cancerous polyps and 28 of the patients had normal colons.

The new DNA colorectal cancer test detected 91 percent of the colorectal cancers and 73 percent of the polyps. There were no incorrect readings among any of the patients with a normal colon.

The Mayo Clinic study demonstrated the feasibility of DNA stool analysis as a screening approach and paved the way for a three-year clinical trial. The clinical trial will be funded by a $4.9 million grant from the National Cancer Institute. Dr. Ahlquist will lead the research effort and Mayo Clinic will be the principal site for the clinical trial.

The DNA colorectal cancer test has several patient-friendly features. An individual can provide a stool specimen in his home by using a special kit that fits on the toilet seat. The DNA test involves no dietary or medication restrictions. Furthermore, in contrast to all invasive screening methods used for colorectal cancer detection, no bowel preparation is needed for the test.

The DNA test also detects tumors and polyps throughout the entire colon, whereas sigmoidoscopy, another invasive detection method, inspects only the lower portion of the colon.

Although the costs of the DNA colorectal cancer test are expected to be more than that of a fecal blood test, Dr. Ahlquist says that in the long run the DNA method could be more cost-effective.

Letter from the President

In this issue of Mayo Alumni we pause to formally recognize the anniversary of a significant medical achievement that occurred at Mayo Clinic 50 years ago. The discovery of cortisone — a medical milestone worthy of a Nobel Prize — is a tribute to the collaborative spirit and innovation inspired by the Mayo brothers that continues to guide Mayo Foundation through today’s evolving healthcare environment. Additional articles provide a look at how Mayo is creating culturally sensitive opportunities for minorities to participate in research, and a profile of Dr. Audrey Nelson, a physician who has quietly made significant leadership contributions to Mayo and several other medical organizations.

The Mayo Medical Alumni Association, together with the Foundation, is also exploring innovative ways to promote even greater communication among alumni and with Mayo Clinic consultants. Two ideas under exploration include providing e-mail for life to alumni and creating an enhanced association Web site. Look for information about these benefits in future issues of Mayo Alumni, as it becomes available.

The 61st International Alumni Meeting, April 19-21, 2001 in Atlanta, Ga., will continue the themes of innovation and leadership, with notable speakers discussing the future of the American healthcare system; issues facing Mayo’s three practice sites; and evaluating professionalism in students and residents, while mentoring our physicians of the future through our educational programs. We hope you can join us in Georgia in the springtime.

I will conclude my tenure as your president following the International Alumni Meeting. It has been my pleasure to lead your organization and meet so many of our colleagues, both here and abroad. Thank you for this opportunity to serve you.

Sincerely,
Gerald Bechamps, M.D.
President
Mayo Medical Alumni Association
“Because of the high rate of accuracy, the DNA colorectal cancer test could require fewer, unnecessary colonoscopies to be performed,” he says. “That will mean a savings in healthcare expenses because having a colonoscopy in this country currently costs anywhere from $1,000 to $2,500. He adds that, “Costly operations to remove colorectal cancers also may be reduced if the new method leads to more effective detection of pre-cancerous polyps.”

“Most important, the new DNA colorectal cancer test has the potential to significantly reduce the morbidity and mortality of colorectal cancer,” says Dr. Ahlquist. “Colorectal cancer is largely preventable and curable if detected early.”

The study was published in the Oct. 11 issue of Journal of the American Medical Association. It found that the risk of breast cancer is 3.3 times greater for breast cancer patients’ sisters and daughters who had ever used oral contraceptives compared to those with similar risk who had never used oral contraceptives. This did not apply to nieces, granddaughters or women who married into the family, who only had a 1.2-fold greater risk of breast cancer with pill usage. In families in which five or more blood relatives had been diagnosed with breast or ovarian cancer, the risk was even greater. In those families, sisters and daughters of the breast cancer patients were 11.4 times more likely to develop breast cancer if they had ever taken oral contraceptives.

The elevated risk for first-degree relatives (sisters, daughters) of breast cancer patients was particularly evident for women who had used oral contraceptives introduced prior to 1975, when the formulations were more likely to contain higher doses of estrogen and progestins. The study could not make statistically significant conclusions about sisters and daughters of breast cancer patients who had used more recent formulations of oral contraceptives containing lower doses of estrogen and progestins, due to the small number of women in the study who had taken them.

This is the first family, or multigenerational, study of the association between oral contraceptive use and the development of breast cancer in women with a family history of the disease.

The study’s authors do not recommend additional screening for women who have taken earlier formulations of oral contraceptives and also have first-degree relatives with breast cancer, but they encourage these women to be sure to follow the recommended screening guidelines.

Prognosis improves dramatically for HIV patients in ICU

A study co-authored by Mayo Clinic and the University of Florida Health Science Center shows that the prognosis for HIV patients who are admitted to intensive care units is much better than it was in the mid-1980s. The study reports that the ICU mortality rate for HIV-infected patients has fallen to 29.6 percent. In the mid-1980s, ICU mortality was greater than 80 percent for this patient population.

“HIV patients are surviving at greater rates because of a combination of health factors,” says Bekele Afessa, M.D., Mayo Clinic pulmonary and critical care specialist and lead author of the study. “Physicians are using prophylactic drugs, antiretroviral therapies and new antibiotics to fight the life-threatening conditions that are associated with HIV. The growing knowledge of healthcare workers is another important factor in improved survival rates.”

The study was designed to describe the clinical course and prognostic factors for HIV-infected patients. Researchers studied 141 patients who were admitted to the intensive care unit a total of 169 times between April 1995 and March 1999 at the University Medical Center in Jacksonville, Fla. Overall, 12 percent of HIV-related hospital admissions resulted in admission to the ICU. The most frequent reason for this was respiratory failure.
The most common immediate cause of death was bacterial infection. Of the patients studied, 78 percent developed organ failure, a significant indicator of outcomes. Patients who experienced the failure of only one organ were likely to survive, while patients who experienced multiple organ failure were less likely to live through hospitalization. Another risk factor for mortality was the development of systemic inflammatory response syndrome (SIRS).

Surprisingly, the helper T lymphocyte cell (CD4) count did not correlate with mortality. CD4 levels can decrease severely in advanced cases of HIV infection. Low levels indicate a lack of immune cells, which leaves the patient susceptible to other serious infections.

Dr. Afessa hopes that the results of the study will raise awareness about better survival rates in the HIV population. “Some patients and healthcare providers still believe that the prognosis for critically ill HIV patients is grim,” he states. “It is our hope that people will approach the treatment of these patients more aggressively and positively and that prognoses will continue to improve.”

The study was published in the July edition of Chest.

New method identified for detection of recurring bladder cancer

Mayo Clinic researchers have developed a new laboratory method for detecting recurring cancer of the bladder sooner and more accurately, according to a study published in The Journal of Urology.

The new detection method uses fluorescence in situ hybridization (FISH) to analyze cells in the urine for genetic changes characteristic of bladder cancer.

The double-blinded study compared the FISH detection method with urine cytology, currently the most commonly used test for detecting bladder cancer. The study involved the testing of 280 voided urine specimens from 200 males and 65 females.

The FISH method detected cancerous cells in the urine of 81 percent of the patients with bladder cancer, says Kevin Halling, M.D., a Mayo Clinic pathologist and lead researcher on the study. By comparison, urine cytology detected cancerous cells in only 57 percent of the patients with bladder cancer.

“Most importantly, the FISH test picked up more than 95 percent of the high grade cancers, which are the most dangerous and important group of bladder cancers because they have a high probability of progressing to potentially incurable muscle-invasive bladder cancer,” says Dr. Halling.

With only one exception, the only cancers the test missed were low-grade tumors, which are less dangerous and have only a 3 to 5 percent chance of progressing to a higher stage tumor over five years.”

The FISH test also detected recurrence of the cancer three to six months earlier than by the cytology, says Dr. Halling. This earlier detection capability should allow treatment to be initiated earlier and possibly give the patient a greater chance for survival, he said.

Mayo Clinic researchers collaborated with scientists from Vysis, Inc., in Downers Grove, Ill., to develop the FISH detection method.

Relationship between Parkinson’s disease and smoking, alcohol and coffee consumption may identify new risk factor

A new Mayo Clinic study shows that the same underlying factors that cause people to seek out the behaviors of coffee or alcohol consumption or smoking may also make them less likely to develop Parkinson’s disease. The findings may point to a new, underlying risk factor that could be helpful in diagnosing and treating the disease.

The study was published in the Nov. 14 issue of Neurology, the scientific journal of the American Academy of Neurology.

The study of the medical records of 196 people with Parkinson’s disease and 196 people without the disease revealed that coffee drinkers had less than half the risk for developing Parkinson’s disease. Among those who did not have Parkinson’s disease, 37 percent drank four or more cups per day while 21 percent of those with Parkinson’s disease consumed four or more cups daily. Additionally, the average age of onset of the disease was eight years older for people who consumed coffee compared to those who never did.

Researchers emphasize that they do not know that coffee, alcohol or smoking have a protective affect for Parkinson’s disease, says Demetrius Maraganore, M.D., a Mayo Clinic neurologist who co-authored the study. In animals, the brain chemical dopamine, which is lacking in the brains of Parkinson’s disease patients, has been linked to “novelty seeking behavior.”

While relationships similar to this also existed for alcohol consumption and smoking, overall the association

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While relationships similar to this also existed for alcohol consumption and smoking, overall the association
was not statistically significant. However, extreme types of tobacco (chewing, snuff) and alcohol (diagnosed alcoholism) use were significantly less frequent in Parkinson’s disease patients.

“We are in no way urging people to begin or increase their use of coffee, alcohol or tobacco,” says Dr. Maraganore. “What this study shows is a pattern compatible with several hypotheses relating to personality:

• Individuals who will later develop Parkinson’s disease may avoid behaviors that are addicting or that may jeopardize their health.

• Individuals who will later develop Parkinson’s disease avoid coffee or smoking because they are intolerant to their pharmacologic stimulating effects.

• Individuals who will later develop Parkinson’s disease would not experience the rewarding effect of smell involved in these consumption habits. There also may be a relationship between avoiding smoking and coffee and psychiatric conditions occurring in the preclinical phase of Parkinson’s disease.

“Coffee, smoking and possibly alcohol could alternatively be inversely related to Parkinson’s disease through a direct protective effect. This remains unproven,” says Dr. Maraganore.

Similar results were released earlier this year in a report by the Honolulu Heart Study. Confirming results from the Harvard School of Public Health are expected in upcoming months.

Study shows life-threatening link between Viagra and nitrates and recommends guidelines for safe use

A study published in November in Circulation reports that sildenafil citrate (Viagra), when combined with nitrates, can cause serious and prolonged decreases in blood flow through critically narrowed coronary arteries.

Researchers at Osaka University, Osaka, Japan, and Mayo Clinic monitored changes in blood pressure and blood flow through coronary arteries in animals given nitrate along with the doses of Viagra achieving similar blood levels as prescribed for erectile dysfunction. They believe the study shows a possible cause for the sudden deaths that have been reported among men using Viagra.

“We found that Viagra, when combined with nitrates, causes a prolonged reduction in blood flow to the heart in critically narrowed coronary arteries,” says Bijoy Khandheria, M.D., a Mayo Clinic cardiologist and one of the study authors. “The good news is that Viagra alone did not significantly decrease blood flow through narrowed arteries. In normal vessels, it actually increased blood flow. The negative effect came only when it was combined with nitrates.”

In addition to highlighting the need for patients to only take Viagra under medical supervision, Dr. Khandheria says the findings provide important guidance for physicians in how to prescribe Viagra safely. “Many heart patients need to take nitrates, and many want to use Viagra. This study shows that they should not be taken together. The adage of taking a nitroglycerine tablet prior to sexual intercourse falls by the wayside if Viagra is prescribed, since the combination can be lethal.”

Men being treated for heart disease are several times more likely to experience moderate or complete impotence, compared with other men their age, says Dr. Khandheria. As a result, many heart patients are interested in using Viagra to maintain their quality of life, so physicians need to know how it interacts with other medications they may be taking.

Grapefruit juice may increase medication side effects

Downing a glass of grapefruit juice with one’s morning medicine could increase adverse effects of the prescription medication, reports a Mayo Clinic review of various studies that looked at the interactions.

Unlike other citrus fruit juices, grapefruit juice interacts with a variety of prescription medications by inhibiting one of the intestinal enzyme systems, Mayo Clinic researchers report after a review of clinical findings of drug-grapefruit juice interactions. The review appears in the September issue of Mayo Clinic Proceedings.

The interaction of grapefruit juice with some prescription drugs is of concern, especially as the consumption of the juice is likely to grow. With the recent fortification of citrus juices with calcium, the intake of grapefruit juice will likely increase, particularly in middle-aged and elderly populations, groups in which the intake of medications is highest. This is of particular concern because juice and medications are commonly consumed together at breakfast, report the authors, Garvan Kane, M.D., and James Lipsky, M.D., a...
Mayo Clinic pharmacologist.

Almost 10 years have passed since investigators first discovered an interaction between grapefruit juice and felodipine, a drug used to treat cardiac failure and angina, and lower blood pressure. Since then, there have been a number of studies on grapefruit juice components, medications with which it interacts and the mechanism of its action. However, no specific studies have addressed the clinical outcomes of the effects of drug-grapefruit juice interactions, the reviewers report.

Cisapride, cyclosporine, carbamazepine, tacrolimus, methadone and many of the HMG-CoA reductase inhibitors and dihydropyridine calcium antagonists have severe dose-dependent adverse effects. Grapefruit juice is known or presumed to cause a marked increase in the serum levels of these medications. The effect is similar in magnitude to that with itraconazole and erythromycin, and so if a drug should not be taken with these medications, then it should not be taken with grapefruit juice either, the researchers write.

Although some drugs are given with others to enhance the focus of the drug on a specific area, the use of grapefruit juice for this purpose is deemed unpredictable and potentially hazardous.

In standard doses, grapefruit juice has no effect on the action of drugs over time when given intravenously, the article states. Each patient's situation should be considered, and advice should be based on grapefruit juice consumption history and the specific medications involved.

Mayo Foundation Board of Trustees approves new research space

The Mayo Foundation Board of Trustees approved funding in November that will finish three floors of the new Stabile Building at Mayo Clinic in Rochester for research use.

The Stabile Building, which opened in 2000, is a 10-floor, 195,000-square-foot facility designed to meet the unique and changing needs of laboratory and education support. The new floors will house Hematology Research and Hematology Malignancies Research, Kidney Diseases Research and Thoracic Diseases Research. The placement of these programs in the Stabile Building will help alleviate some of the immediate space pressures these research programs are experiencing.

Alumni meetings

Receptions

Society of Critical Care, Feb. 10-14, San Francisco, Calif.
American Association of Dermatology, March 3, Washington, D.C.
American College of Cardiology, March 19, Orlando, Fla.
American College of Physicians, March 30, Atlanta, Ga.
The American Association of Neurological Surgeons, April 23, Toronto, Canada
American College of OB/GYN, April 28-May 2, Chicago, Ill.
American Roentgen Ray Society, April 29-May 4, Seattle, Wash.
American Association of Clinical Endocrinologists, May 2-6, San Antonio, Texas
Digestive Disease Week, May 20, Atlanta, Ga.
American Urologic Association, June 2-7, Anaheim, Calif.
American Society for Colon and Rectal Surgeons, June 2-7, San Diego, Calif.
Mayo Update

Postgraduate meetings

For more information, please complete and return the tear-out card in this issue. Or you may call 507-284-2509, or 1-800-323-2688 toll free. Unless otherwise noted, meetings are held in Rochester.


Mayo Foundation Presents: Gastroenterology and Hepatology for the 21st Century, Feb. 5-9, 2001, Big Island, Hawaii

Continuing Challenges in Hematology, Oncology and Hematopathology, Feb. 5-9, 2001, Snowmass, Colo.


Selected Topics in Internal Medicine, March 19-23, 2001, Big Island, Hawaii

4th Mayo Clinic Endocrine Course, March 25-30, 2001, Big Island, Hawaii


10th Annual Urogynecology and Disorders of the Female Pelvic Floor, April 5-7, 2001, Scottsdale, Ariz.


Annual Practice of Internal Medicine, April 30-May 4, 2001, Big Island, Hawaii

8th International Practical Surgical Pathology, May 1-4, 2001, Barcelona, Spain

Mayo Clinic OB/GYN Clinical Reviews, June 17-20, 2001, Whistler, British Columbia, Canada

Fifth Annual Meeting of the International Association of Medical Science Educators, July 21-24, 2001

Alumni news

1950s

Robert Brandenburg (Internal Medicine/Cardiology ’51) is president of the Green Valley, Arizona, chapter of the American Heart Association and writes a cardiovascular disease column for the Green Valley News.

1960s

Malvin Barer (Orthopedics ’67) has joined the Department of Orthopedic Surgery at Children’s Hospital of Northern California, where he directs several orthopedic clinics.

Stewart Carrington (Dermatology ’69) has retired in Salmon, Idaho.

David Cram (Dermatology ’66) has published his third book. Dr. Cram, who retired from active practice in 1991 because of Parkinson’s Disease, published Coping with Psoriasis, A Patient’s Guide to Treatment. He also has published books about maintaining the doctor-patient relationship under managed care and a guide to Parkinson’s Disease.

J. Gordon Millichap (Pediatric Neurology ’62) is editor of Pediatric Neurology Briefs, a monthly journal review and CME service to neurologists, pediatrics and other interested professionals.

George Pingree (Ophthalmology ’69, Internal Medicine ’66) served as a Mormon Church mission president from 1995 to 1998 in Nigeria, where he worked to advance ophthalmology care and training, teach health maintenance and disease prevention and increase literacy.

Robert L. Smith (Oral and Maxillofacial Surgery ’67) has established the first maxillofacial teaching lectureship and surgical demonstration program at the College of Dentistry in Cuenca, Ecuador. It is an annual program taught by visiting oral and maxillofacial surgeons from the U.S.

1970s

Joseph Citron (Ophthalmology ’75) graduated from law school in 1997 and now practices both ophthalmology and criminal law defense in Atlanta, Ga.

David Movius (Periodontics, ’75) was awarded the 2000 Clinical Excellence Award by the Montana Dental Asssociation. The award promotes continuing dental education and clinical excellence in Montana dentistry.

Robert Schafermeyer (General Surgery ’76) was installed as president of the American College of Emergency Physicians.

1980s

Carl Backer (Mayo Medical School ’80) has been promoted to professor of surgery at Northwestern University Medical School. Dr. Backer has been an attending pediatric cardiac surgeon at
Children’s Memorial Hospital in Chicago since 1988.

Renée Cousins (Mayo Medical School ’81) received the Founders’ Award by Everyone Sharing Child Abuse Education, a Denver-based group that raises awareness about child abuse. Dr. Cousins was also honored for serving as a volunteer commissioner on Denver’s Head Start board.

Roger Dailey (Mayo Medical School ’82) has been appointed Lester T. Jones Endowed Chair of Oculoplastics at the Casey Eye Institute, Oregon Health Sciences University, Portland, Ore.

Nadey Hakim (General Surgery ’89) was elected first vice president of the International College of Surgeons and was nominated for the King Faisal Prize in Medicine.

Lee Kamman (Thoracic Diseases ’83) has been elected vice-chair of the United Hospital Board of Trustees in St. Paul, Minn.

Victor Marks (Internal Medicine ’81) was named interim president and chief executive officer of Geisinger Health System, Danville, Pa.

Alejandro Ruiz-Argüelles (Microbiology ’82) and Guillermo Ruiz-Argüelles (Hematology ’83) were promoted to the top level of the National Research System of Mexico. They jointly organized a medical meeting in Puebla, Mexico, to commemorate the 50th anniversary of the Laboratorios Clínicos de Puebla, founded by their father, Guillermo Ruiz-Reyes.

Keith Salzman (MMS ’89) completed his M.P.H. degree at the University of Washington. He is a judge for research submissions to the Uniformed Academy of Family Physicians through 2002, and is a fellow of the American Academy of Family Physicians.

1990s

Raymond Glahn (Nephrology Research ’92) was awarded the 1999 Early Career Scientist Award by the U.S. Department of Agriculture for his work in developing a cell culture model that allows him to simulate digestion and nutrient absorption to determine iron bioavailability in foods. Dr. Glahn is an agricultural research scientist for the United States Department of Agriculture in Ithaca, N.Y.

Michael Keller (Mayo Medical School ’97) completed a three-year family practice residency at St. Joseph Hospital in Denver. He holds joint appointments at the University of Colorado Health Sciences Center as senior instructor in the Division of Emergency Medicine and the Department of Family Medicine.

Gregory Perez (Mayo Medical School ’91, Dermatology ’95) was recently appointed section chief of the Dermatology Department at North Ridge Medical Center in Fort Lauderdale, Fla.

Michael Saribalas (Psychiatry ’96) was appointed to the American Academy of Sleep Medicine Fellowship Training Committee. Dr. Saribalas is medical director of Licking Memorial Hospital Sleep Center in Newark, Ohio.

Fabio Teixeira (Surgical Research ’99) is professor of surgery at the University of Marilia Medical School, Brazil.

Kristy Weber (Musculoskeletal Oncology ’98) was honored with the Young Investigator Award at the Connective Tissue Oncology Society meeting in Amsterdam for her basic science research on osteosarcoma metastasis.

2000

James N. Johnson (Family Medicine ’00) is a fellow in sports medicine at Stanford University, San Jose Medical Center.

Dustin Smith (Family Medicine ’00) has joined Trimark Physician Group in Eagle Grove, Iowa.

Iftikhar Ahmed was appointed to the Program Committee of the American Society for Dermatopathology.

Peter Amadio was elected president-elect of the Minnesota Medical Association.

Arnold Aronson was awarded a degree of honorary Doctor of Science from the University of Wisconsin.

George Bartley, James Garrity and Colum Gorman were awarded the Leadership Award from the American Society of Ophthalmic Plastic and Reconstructive Surgery.

Richard Berger was elected treasurer of the American Association for Hand Surgery.

Daniel Berry was elected secretary of the Mid-America Orthopaedic Association.

Christopher Chute gave Grand Rounds at the NIH Clinical Center.

Clayton Cowl gave the keynote address to the Civil Aviation Medical Association.

Mark Dahl was named chair of the Department of Dermatology, Mayo Clinic Scottsdale.

Roger Dozois gave the keynote lecture at the European Association of Coloproctology.
Alireza Falahati Nini, Sundeeck Khosla, Lawrence Riggs and Michael O’Fallon received the American Society for Bone and Mineral Research Award for Outstanding Research in the Pathophysiology of Osteoporosis.

Lawrence Gibson was named editor-in-chief of the International Journal of Dermatology.

Gregory Gores was appointed to the General Medicine A-2 Study Section of the National Institutes of Health. He also received a MERIT Award from the National Institutes of Health. He was also appointed to the International Collegium Oto-Rhino-Laryngologicum Amicitiae Sacrum.

Wojciech Pawlina was elected councilor of the American Association of Clinical Anatomists.

Alvaro Pineda received the Cohn-De Laval Award of the World Apheresis Association.

Elliott Richelson has been elected to the Psychiatry Expert Committee by the U.S. Pharmacopeia Council of Experts.

Lawrence Riggs received an Award for Innovations in Osteoporosis from the North American Menopause Society.

John Service, Aidan Carney and Ian Hay were named honorary members of the American Association of Endocrine Surgeons.

Joseph Sirven was elected president of the Epilepsy Foundation of Arizona.

Charles Thomas Jr. was named chair-elect of the Midwest Section of the American Federation for Medical Research.

Joyce Tinsley was appointed to the American Psychiatric Association’s Committee on Training and Education in Addiction and was re-appointed to the Committee on Graduate Medical Education.

Richard Vetter was appointed to the Advisory Committee on Medical Use of Isotopes of the U.S. Nuclear Regulatory Commission.

Bruce Wolf was elected to the American Board of Colon and Rectal Surgery. He was also elected honorary member, Canadian Society of Colon and Rectal Surgeons and was elected a foreign corresponding member of the Sociedad de Paraguaya Coloproctologia.

Birgit Kantor (Cardiovascular Diseases) was awarded the AstraZeneca Young Investigator Award.

Pramod Kelkar (Allergy and Immunology) was appointed by the American Academy of Allergy, Asthma and Immunology to the Organization of Resident Representatives (ORR) of the Association of American Medical Colleges.

James Kofler (Diagnostic Radiology) was named chair of the American Association of Physicians in Medicine Ultrasound Committee.

Inna Ovsyannikova (Mayo Vaccine Research Group) received the George McCracken ID Fellow Travel Grant to attend the 40th Interscience Conference on Antimicrobial Agents and Chemotherapy.

Sang-Ryoul Park (Clinical Chemistry) was awarded first prize in the Student Poster Competition at the 52nd annual meeting of the American Association for Clinical Chemistry.

Javad Parvizi (Orthopedic Surgery) was awarded the Multipurpose Traveling Fellowship from the Mid-American Orthopaedic Association.

Adam Shafritz (Orthopedic Surgery) has been invited to present the Helene Davridge and Harry Eastlack Scholar’s Lecture at the Third International Symposium on Fibrodysplasia Ossificans Progressiva.
Obituaries

1930s

Paul Cusick, 93, died April 4, 2000. After graduating from medical school at Wayne State University, he went to Mayo Clinic for an ophthalmology fellowship, which he completed in 1937. He served on the Mayo staff for five years before entering the U.S. Army in 1942, rising to the rank of lieutenant colonel. He was chief of the Ophthalmology Section at Percy Jones Hospital in Battle Creek, Mich., before he returned to the Detroit area in 1946 to become chief of staff of the Ophthalmology Department at Providence Hospital. He was the first Detroit physician to perform cataract surgery on live television in 1959 as part of a series televised by the Michigan State Medical Society. He also held teaching positions at the University of Minnesota, Wayne State University and the American Academy of Ophthalmology.

A. Miles Griffin, 92, died Oct. 21, 2000. Dr. Griffin received his medical degree from Northwestern University and completed his fellowship at Mayo Clinic in surgery and urology in 1937. He took a position at the University of Virginia Medical School in 1938 and interned at St. Luke’s Hospital in Chicago before entering a surgical residency at Mayo Clinic, which he completed in 1937. He co-founded a private practice, Whittaker and Mammolito Surgical Associates, where he practiced for 50 years, including 15 years with his son. Dr. Whittaker was also a founding member of the Mid-State Foundation for Medical Care. He served as assistant professor at the University of Illinois College of Medicine in Peoria and on the staff of Methodist Medical Center, where he was president in 1954. Dr. Whittaker was a charter member of the Illinois Chapter of the American College of Surgeons, and later served as its president.

1940s

Charles Cabell, 90, died April 23, 2000. He graduated from the University of Virginia Medical School and completed a fellowship in surgery at Mayo Clinic in 1940. Dr. Cabell served as lieutenant in the U.S. Marine Corps from 1942 to 1946 where he was the battalion medical officer with Edson’s Raiders in World War II. He was awarded the Bronze Star with Combat V and a letter of commendation. He had duty at naval hospitals in San Diego and Oakland, eventually retiring from the Naval Reserves as a commander. Dr. Cabell returned to surgical practice in Fresno, Calif., in 1947. He served as director of the California Division of the American Cancer Society. At St. Agnes Hospital in Fresno, he was chief of surgery, president of hospital staff and chair of the Credentials Committee for 12 years. He retired in 1975.

Lorin Whittaker Sr., 94, died May 27, 2000. Dr. Whittaker earned his medical degree from the University of Illinois College of Medicine at Chicago in 1932 and interned at St. Luke’s Hospital in Chicago before entering a surgical residency at Mayo Clinic, which he completed in 1937. He co-founded a private practice, Whittaker and Mammolito Surgical Associates, where he practiced for 50 years, including 15 years with his son. Dr. Whittaker was also a founding member of the Mid-State Foundation for Medical Care. He served as assistant professor at the University of Illinois College of Medicine in Peoria and on the staff of Methodist Medical Center, where he was president in 1954. Dr. Whittaker was a charter member of the Illinois Chapter of the American College of Surgeons, and later served as its president.

Mary Davis, 80, died Jan. 23, 2000. Dr. Davis completed medical school at the University of Louisville and followed it with a fellowship at Mayo Clinic in internal medicine in 1947. She practiced medicine in Kentucky and worked for the Red Cross. She also worked for the DuPont Co., in Indiana.

Richard McDowell, 79, died Jan. 17, 2000. Dr. McDowell obtained his medical degree at the University of Buffalo prior to completing a four-year residency in surgery at Mayo in 1948. After his residency, he moved to Tulsa, Okla., and began practicing general surgery at St. John Medical Center, where he remained for 40 years. In 1977, he was appointed director of medical affairs, a position he retained until his retirement in 1990.

Duane Mills, 84, died Feb. 25, 1999. A graduate of the Temple University School of Medicine, Dr. Mills served in the U.S. Army during World War II after his internship. He completed his internal medicine residency at Mayo Clinic in 1949. He then accepted a staff position at Harrisburg Hospital in Harrisburg, Pa., where he practiced for 45 years, serving as associate professor of medicine at the Pennsylvania State University School of Medicine at Hershey Medical Center. He was a past-president of staff at Harrisburg and Holy Spirit hospitals, and a fellow of the American College of Physicians.
Mayo Update

Joseph O’Donnell, 91, died Nov. 25, 1999. Dr. O’Donnell attended Northwestern University School of Medicine and interned at Cook County Hospital and Passavant Memorial Hospital in Chicago. He was appointed as surgeon and chief medical officer in charge of Fort Peck Hospital during construction of the Fort Peck Dam in Montana. He completed a year of surgical training at Mayo Clinic from 1939 to 1940. During World War II, Dr. O’Donnell served in the U.S. Navy in the Pacific Theater. He established a private practice in Clinton, Iowa, where he practiced until his retirement in 1986. Over the years, Dr. O’Donnell served as Clinton City Health Officer and president and chief of staff of Mercy Hospital in Clinton. He was a fellow of the International College of Surgeons and served a two-year term as Regent for the state of Iowa to that organization.

John Raaf, 94, died April 11, 2000. After graduating from Stanford University Medical School, Dr. Raaf served a fellowship in general surgery and neurological surgery at Mayo Clinic, receiving his doctorate degree in 1940. He was professor at the University of Oregon Medical School. He also taught neurological surgery at the Oregon Health Sciences University where he developed the first neurosurgical residency. He was the last surviving founder of the American Association for the Surgery of Trauma and also served as its president. He was a founder of the Oregon Neurosurgical Society and the American Trauma Society. Dr. Raaf served as vice president of the American Association of Neurological Surgeons, Western Surgical Association and the American College of Surgeons.

Philip Seefeld, 85, died Dec. 10, 1999. Dr. Seefeld attended the universities of Wisconsin and Pennsylvania for his medical degree, which he received in 1939. Upon completing his Mayo surgery residency in 1945, he returned to Wisconsin, practicing for 30 years at Columbia Hospital in Milwaukee, which included a two-year appointment as chief of surgery. Dr. Seefeld was also on staff at Children’s Hospital for six years. He retired in 1976.

Donald E. Smith, 80, died July 10, 2000. Dr. Smith received his medical degree from Washington University in St. Louis, Mo., and completed his internal medicine residency at Mayo Clinic in 1949. During World War II, he served as a captain in the U.S. Army Medical Corps. Following residency, he began practice at the Latter Day Saints Hospital in Salt Lake City, where he remained until his retirement in 1993. He was Utah governor of the American College of Physicians from 1972 to 1977, and a charter member of the American Society of Hypertension.

Tom Throckmorton, 86, died June 21, 2000. He graduated from medical school at Northwestern University in 1937 and completed a fellowship in general surgery at Mayo Clinic in 1943. He began his practice in 1943 in Des Moines, Iowa. He was a member of the third team in the world to perform successful open-heart surgery with a cardiopulmonary bypass in 1956 at Iowa Methodist Medical Center. Dr. Throckmorton developed a number of surgical techniques for hernia repair. He was on the teaching staff of Iowa Methodist Medical Center, Broadlawns Medical Center and Mercy Medical Center. The Iowa Methodist Medical Center formed the Throckmorton Surgical Society in 1982 to help educate and train surgeons. He was also known for his interest in daffodils, founding a computerized database of daffodils and the world-recognized color classification code for the flower. He created more than 50 new varieties of the flower.

1950s

John Billingsley, 71, died Aug. 18, 2000. Dr. Billingsley received his medical degree from Case Western Reserve Medical School, and completed a residency in radiology at Mayo Clinic in 1959. From 1959 to 1961 he served as chief of radiology in the U.S. Army Medical Corps at Fort McClellan, Ala. He was a member of The Doctors Mayo Society and the American College of Radiology.

John Carlisle, 80, died May 27, 2000. Dr. Carlisle completed a residency in surgery at Mayo Clinic in 1952 after receiving his medical degree from Harvard University. He practiced at the Lynn Clinic in Detroit for three years before founding the Associated Physicians group practice in Allen Park, Mich. He was associated with Outer Drive Hospital in Southgate, Mich., and Oakwood Hospital in Dearborn, Mich. Dr. Carlisle retired in 1982.

Stephen Maks, 73, died Feb. 3, 2000. After completing medical school at Creighton University in Omaha, Neb., Dr. Maks served a fellowship in internal medicine at Mayo Clinic until 1959. He taught internal medicine at the University of Oregon School of Medicine. Later he was chief of internal medicine at St. Vincent’s Hospital and assistant
clinical professor for the Internal Medicine Department of the University of South Dakota School of Medicine. He had a private practice in Portland, Ore., from 1959 to 1977. He was staff physician and chief of the Department of Medicine at Fort Meade Veterans Affairs Medical Center in South Dakota from 1977 to 1985. Dr. Maks was chief of staff at the Grand Island Veterans Affairs Medical Center from 1985 to 1992 and served in various other positions there until 1997.

Robert Moersch, 79, died May 2, 2000. Dr. Moersch graduated from medical school at the University of Pennsylvania and began his residency at Mayo Clinic in surgery in 1945. He took a leave of absence to serve in the U. S. Army Medical Corps where he reached the rank of captain. Upon his discharge, he returned to complete his residency at Mayo in 1951. He started his private practice in Fort Lauderdale, Fla., where he remained until 1979. He came to Jacksonville, Fla., in 1979 where he served at Broward General Hospital and Holy Cross Hospital until he retired in 1979.

Charles Peake, 73, died Nov. 25, 1999. Dr. Peake served in the U.S. Navy during World War II, and received his medical degree from the University of Pennsylvania. He completed his residency in obstetrics and gynecology at Mayo Clinic in 1955, and established a private practice in Kalamazoo, Mich. He served as chief of obstetrics and gynecology at Branson Methodist Hospital and as clinical professor of OB/GYN at Michigan State University. Dr. Peake introduced modern gynecologic endoscopic procedures to the practice in Michigan. He was a fellow of the American College of Obstetrics and Gynecology and a diplomate of the American Board of Obstetrics and Gynecology.

Joseph Seagle, 75, died May 19, 2000. Dr. Seagle graduated from Indiana University School of Medicine before completing a three-year Mayo residency in pediatrics in 1952. He practiced in Champaign-Urbana, Ill., for six years, helping to found the Pediatric Mental Health Clinic there. He also practiced for 29 years in Tucson, Ariz., where he played an active role in establishing the Women and Children’s Clinic. Throughout his years of practice he stressed the importance of parent education. He retired in 1987.

William G. Smith, 77, died July 12, 2000. Dr. Smith attended the University of Chicago School of Medicine before serving two years at the Naval Medical Research Institute in Bethesda, Md. He entered a residency in surgery at Mayo Clinic in 1951. He then specialized in proctology and was a Mayo staff consultant until 1959, when he moved to El Paso, Texas, to establish a private practice. He practiced in El Paso until his retirement in 1991. Dr. Smith served as associate editor of Diseases of the Colon and Rectum from 1967 to 1984 and as a member of the executive council of the American Society of Colon and Rectal Surgeons from 1972 to 1973. He was a diplomate of the American Board of Colon and Rectal Surgeons.

Bartholomew Spence, 83, died Aug. 9, 2000. Graduating from medical school at Northwestern University, Dr. Spence then served in the U.S. Army Medical Corps in World War II. Following his service, he completed a fellowship in dermatology at Mayo Clinic in 1950. During his career, he served as chair of the Department of Dermatology at the Palo Alto Clinic in California, where he practiced from 1953 until he retired in 1983. He also taught at Stanford University Medical School.

1960s

Edward Jorgensen, 72, died Oct. 4, 2000. Dr. Jorgensen graduated from the University of Minnesota Medical School in 1954. After his discharge in 1957 from the U.S. Air Force where he served as a flight surgeon, he went into general practice in Duluth. Dr. Jorgensen completed his residency training in obstetrics and gynecology at Mayo Clinic in 1967. He practiced in Fergus Falls, Minn., until 1969 when he returned to Mayo Clinic Rochester. Dr. Jorgensen retired as senior consultant in the Obstetrics and Gynecology Department in late 1992.

Robert Palmer, 69, died Sept. 5, 2000. Dr. Palmer served in the U.S. Army for two years during the Korean War before earning his medical degree from Northwestern University Medical School. Upon completing an internal medicine residency at Mayo Clinic in 1963, he joined Scott and White Clinic in Temple, Texas, where he was instrumental in establishing the Division of Hematology and Medical Oncology. He retired in 1989.
Donald Ritter, 75, died June 28, 2000. After receiving his medical degree from Indiana University, Dr. Ritter served fellowships in pediatrics and pediatric cardiology, finishing his training in 1963. He was named a consultant at Mayo Clinic in 1964 and served as director of the Cardiac Laboratory from 1965 to 1974. He was chair of the Division of Pediatric Cardiology in 1973. He also served as a professor at Mayo Medical School. Dr. Ritter was president of the Midwest Pediatric Society. He retired in 1988.

Emre Kokmen, 63, died July 9, 2000. Dr. Kokmen received his medical degree in 1962 from Istanbul University Faculty of Medicine before interning at Lutheran Hospital of Maryland from 1962 to 1963. He was a resident from 1963 to 1967 in the Department of Psychiatry, then in the Department of Neurology at the University of Michigan Medical Center and in the Department of Neurology at Wayne State University in Detroit. He served in the Turkish Army Medical Corps from 1967 to 1969. He joined the Department of Neurology, Mayo Clinic Rochester in 1978 and was named a professor of neurology in 1992 at the Mayo Medical School. He was head of section in the Department of Neurology from 1987 to 1994. In 1991, Dr. Kokmen received the Mayo Foundation Distinguished Clinician Award. Dr. Kokmen was also the Cora Kanow Endowed Professor of Alzheimer’s Disease Research from November 1992 to 1999.

Edward McElfresh, 58, died Aug. 10, 2000. Dr. McElfresh received his medical degree from the University of Minnesota, and went on in 1973 to complete an orthopedic surgery residency and hand surgery fellowship at Mayo. After serving two years in the U.S. Army at McDonald Army Hospital in Fort Eustis, Va., he returned to Minnesota and began practice at St. Anthony Orthopedic Clinic in St. Paul. He served as associate professor of orthopedic surgery at the University of Minnesota, and as both chief of hand surgery and chief of orthopedic surgery at the Minneapolis VA Medical Center.

1970s

Peter Chevalier, 60, died April 14, 2000. Dr. Chevalier received his Ph.D., from the University of Minnesota in 1967. He taught at the University of Delaware from 1967 to 1973, at which time he joined Mayo’s faculty as an associate consultant and research fellow in physiology and biophysics. In 1978, he left Mayo to become associate director, Division of Lung Diseases, at the National Institute of Health for two years before joining Medtronic as a senior staff scientist in the Pacing Product Residency Program. He retired from Medtronic in 1998. Dr. Chevalier was a member of the American Heart Association, the American Physiological Society and the American Thoracic Society, as well as a fellow in the American College of Cardiology.

Douglas Polk, 50, died Dec. 19, 1999. Dr. Polk graduated from the University of Oklahoma School of Medicine in 1977. He served an internship in neurosurgery at Mayo from 1977 to 1978, after which he completed a neurosurgery residency at the University of Oklahoma. He also studied briefly at Queens Square in London. Dr. Polk joined the Oklahoma Neurological Surgery Clinic in 1983, where he practiced until 1996. He was an assistant professor of neurosurgery at the Oklahoma Health Sciences Center and member of the Congress of Neurological Surgeons.