Mayo Clinic embraces the genomics revolution
Features

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The effect of genomics on medicine is expected to be widespread, often described as the “genomics revolution.” Mayo Clinic has assembled the Mayo Genomics Task Force to guide it on genomics initiatives. Also in this story, Colum Gorman, M.D., Ph.D., now acting chair of Mayo’s Health Sciences Research, answers questions about what clinicians might see with the coming changes.

Plummer Building doors closed for National Day of Prayer and Remembrance 8
In a solemn ceremony at noon on Friday, Sept. 14, the doors of Mayo Clinic’s historic Plummer Building were closed in remembrance of the victims of the terrorist attack on Tuesday, Sept. 11 that stunned Americans and the world. The doors only have been closed at times of great loss for Mayo and the nation.

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Alumni and guests experienced Southern hospitality, while attending a series of educational meetings and hearing internationally prominent speakers at the event, April 19-21 in Buckhead, Ga.

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Presenting the Raymond Pruitt Lecture at the International Meeting, John Stobo, M.D., president of the University of Texas Medical Branch, Galveston, and Linda Blank, of the American Board of Internal Medicine, offered a call to action on how physicians can strengthen the bond with patients and improve the practice of medicine.

Shooting for the stars: A profile of Dr. Bernard Harris Jr. 22
Bernard Harris Jr., M.D., a physician, astronaut and businessman, was the first African-American to walk in space. Dr. Harris set his sights on the heavens at an early age and never lost focus, eventually flying on two space shuttle missions. He’s also established a foundation that helps young students achieve their dreams by helping them meet successful professionals, value education and set goals.
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The secondary structure of N-methyltransferase is depicted as a “ribbon diagram” which traces the positions of the alpha carbons in the amino acids. Such diagrams convey the structure of the proteins comprising genes in terms of elements like alpha helices and beta loops. Taken from the work of Drs. Yuan-Ping Pang and Richard Weinshilboum.
GENOMICS:

THE EMERGENCE OF A PROFOUND AND FUNDAMENTAL TRANSFORMATION OF MEDICINE

The Human Genome Project provides “the ultimate tool for understanding ourselves at the molecular level... We used to think our fate was in the stars, now we know, in large measure, our fate is in our genes.”

—James Watson, Ph.D.
Recipient of 1962 Nobel Prize in Physiology or Medicine

At the beginning of the last century, William and Charles Mayo embraced the revolutionary concepts of anesthesia and aseptic surgery. And they developed a revolution of their own when they put physicians together as a team and integrated their practice with medical research and medical education. Now, at the dawn of a new century, the institution that they founded is facing a new revolution brought about by recent developments in the science of genomics.

In this article, we will explore the specifics of dramatic changes that have led many to label this a “genomics revolution” and tell you about Mayo’s response to the opportunities and challenges presented by this revolution. Finally, Colum Gorman, M.D., Ph.D., who recently retired from the clinical practice of endocrinology at Mayo Clinic Rochester and is now acting chair of Health Sciences Research, answers questions on how the coming changes will affect clinicians.
THE GENOMICS REVOLUTION

The Mayo Genomics Task Force, responsible for guiding Mayo’s genomics initiatives, has described the coming changes as a “singularity that will profoundly and fundamentally alter medicine.”

“Pharmaceutical companies are studying 16,000 genes and proteins this year,” reports Thomas Spelsberg, Ph.D., chair of the Mayo Genomics Education Steering Committee (GESC). “That’s 25 times the number of genes and proteins studied in the whole history of medicine.”

Although the information from the Human Genome Project would fill 200 city phone books, it is a molehill compared to what one scientific journalist calls “Mount Proteome.” The human genome contains only about 35,000 genes. But they generate about one million protein products. To complete the human proteome, the gene for each protein will have to be sequenced and the protein’s primary and secondary structure understood. The study of these proteins and their functions is called proteomics and it is this field that will produce dramatic changes in diagnostics and therapies.

The effect on the medical field will be widespread. Eventually, there will be a genetic diagnosis for most human diseases and their subcategories. New laboratory tests will determine genetic risk for disease and that will mean an increased demand for genetic counseling. Scientists studying pharmacogenomics, including those at Mayo, have already been able to tailor drug therapy to the individual patient’s genetic makeup. Developing a better understanding of gene expression will speed up the application of gene therapy to replace or augment many traditional drug therapies. And all of these changes will lead to new and challenging ethical issues.

THE FUTURE IS HERE

One dramatic example of what we can expect for our patients comes from a study published in the New England Journal of Medicine by Mayo pediatric cardiologist, Michael Ackerman, M.D., Ph.D. The study involves people who are at risk for cardiac arrhythmias as a result of sudden sensory stimulus, such as hearing a doorbell or diving into a pool. Dr. Ackerman discovered that single nucleotide changes could alter potassium channels in the heart, which, in turn, can result in sudden death.

“A case of a young woman who died following a near-drowning in a public pool was brought to my attention,” says Dr. Ackerman. “I speculated that this good swimmer may have died because of a cardiac arrhythmia. I performed molecular genetic testing on a piece of autopsy tissue and discovered a potassium channel mutation.”

With this finding, Dr. Ackerman recommended genetic testing for the remaining family. While clinical testing suggested that all three sisters were normal, the genomic assay revealed that one sister had the same genetic mutation. The identification enabled her to be treated with beta-blocker therapy in order to avert a second tragedy in the family.

MAYO’S COMMITMENT TO GENOMICS

While acknowledging that DNA is not the only factor that determines a patient’s medical destiny, Mayo recognizes the transformational nature of the coming changes. Likewise, continuously improving all processes that support patient care, education and research is one of Mayo’s core principles and a constant objective of Mayo’s mission.

“We regard this as an opportunity to help people alter where they might be headed without this knowledge,”
Mayo Alumni    Fall 2001

says Richard Weinshilboum, M.D.,
director of Mayo’s Genomics Research
Center (MGRC). “We have embarked
on a plan to promote genomics
research and educate our physicians
about the changes it will bring in
order to provide the best care for our
patients.”

In June 2000, the Genomics Task
Force issued recommendations for
strategies to integrate genomic
research at Mayo and to prepare
Mayo staff and students for
developments in medical genomics.
Their deliberations led to the
formation of the Mayo Genomics
Research Center, announced in

“**We have embarked on a plan to promote genomics research and educate our physicians about the changes it will bring in order to provide the best care for our patients.**”

— Richard Weinshilboum, M.D.

The tertiary structure of N-methyltransferase is depicted by a 3D model of the positions of the atoms in each amino acid (hydrogen atoms are left out). Typically, bonds are indicated by lines drawn between atomic positions thus showing molecular structure. From the work of Y.P. Pang, Ph.D.

Education

The Mayo Genomics Education Steering Committee is developing and instituting a plan to introduce Mayo staff and trainees to medical genomics and educate them about developments as they occur.

“They will be deluged with information about new laboratory tests and new and more complex diagnoses,” says Dr. Spelsberg. “And there will be lots of questions from patients and outside physicians. Our committee is working hard to help them deal with all of this in a way that will increase our reputation for being a dependable source of medical information.”

The GESC has proposed a comprehensive educational plan to disseminate information through selected genomics educators from each department or division.

“We plan to teach the teachers,” says Dr. Spelsberg. “We have 96 departments, divisions and programs at Mayo Rochester, so we proposed...
choosing a representative from each area to be a genomics educator for their respective constituency.”

The genomics educators will pass on the latest advances in their specialty to their colleagues and foster communication between them and Mayo’s genetic experts. They will identify relevant medical genomics resources and review and submit department contributions to Mayo’s Intranet.

In addition, the committee plans to collaborate with Mayo’s other education programs and Mayo Health System to help each of them integrate genomics education into their curricula or practice.

RESEARCH

The Mayo Rochester Research Committee, through the MGRC, has launched a major new research initiative at Rochester. The five-year plan includes the recruitment of specialized staff in its first phase.

Areas targeted for enhancement include a centralized translational genomics laboratory and archival facility; bioinformatics; proteomics; basic genomics research; genetic epidemiology; genomics-related industrial partnerships; and bioethics.

CENTRAL TRANSLATIONAL GENOMICS LABORATORIES

The MGRC regards one of the first steps required for advancing genomic research in both basic and clinical departments to be the creation of a centralized DNA extraction and archiving facility. The facility, which will be available to all staff, will include a translational genomics laboratory where new genomic and proteomic research techniques can be introduced and tested.

BIOINFORMATICS

Biology is increasingly becoming an information science. Bioinformatics is a discipline that uses computational and statistical analysis tools to store, process and analyze huge amounts of data dealing with the structure and function of proteins (gene products) and their relationship to diseases.

PROTEOMICS

Now that scientists have mapped and sequenced the entire human genome, future developments will likely be generated from efforts to understand the proteome — the full complement of the approximately one million proteins in the body.

BASIC SCIENCE

Concurrently with the mapping of the human genome, the genome of the fruit fly, the nematode worm and the mouse also have been completely sequenced, resulting in the surprising discovery that many genes are genetically quite similar to those in humans. This fact is highly advantageous to basic scientists who will use animal studies in their quest to understand human gene regulation, the function of genes and their relationship to human diseases.

GENETIC EPIDEMIOLOGY

Mayo’s traditional strength in epidemiology has been strained by an increasing number of requests in the fields of statistical and genetic epidemiology. As genomics research activities increase, additional staff with such expertise will be essential to foster a successful genomics research program.

INTERACTIONS WITH GENOMICS-RELATED INDUSTRY

In the next phase of the genomics revolution, biotechnology companies will require high quality medical information from patients who can be confident that their best interests are being respected. Mayo’s reputation and model of care is uniquely suited for making significant contributions in this area.

BIOETHICS

Mayo has a long tradition of involvement in ethical issues and genetic testing clearly raises complex ethical and legal questions. Prominent issues include patient confidentiality and concern about the propensity to believe in biological determinism, which could lead to employment and insurance discrimination.

“Mayo has been a leader in the protection of patients’ rights with regards to genetic testing,” says Christopher Hook, M.D., chair of Mayo Clinical Ethics Council. “We were the first institution to create a specific subcommittee to deal with genetic research issues and the President’s National Bioethics Advisory Commission was very interested in our model.”

In 1996, the DNA Results Committee was formed to advise the Mayo Clinic Institutional Review Board and provide an impartial, multidisciplinary review of the justification for disclosure of genetic information generated by research protocols to patients and to advise how the information should be disclosed.

The Mayo Clinical Ethics Council has developed a plan to evaluate the ethical challenges of genetics testing and genetic manipulation. In addition, it develops guiding ethical principles to be used in genetic and other new technologies.
A CLINICIAN’S PERSPECTIVE

Colum Gorman, M.D., Ph.D., acting chair of Health Sciences Research at Mayo Clinic Rochester, expects the genomics revolution to bring far more opportunities than challenges. His answers to our questions give a clinician’s perspective on the coming changes.

Q: Do you think that the science of genomics will bring truly revolutionary changes to the practice of medicine?

DR. GORMAN:
Yes. The expanding pool of medical information has always been an inexorable process. But this represents a giant step that will be applied to every disease. Let me illustrate with the progression of refinements in techniques used to diagnose medullary thyroid cancer.

When I came to Rochester, the diagnostic technique involved feeling a lump in the neck. After that came ultrasound, which picked up nodules too small to palpate. Next came the recognition that medullary tumors produced calcitonin, so we looked for elevated calcitonin blood levels. Then an agent called Pentagastrin was developed to produce a high response in calcitonin output in a person who has the incipient disease process.

The progression of these refinements has led to earlier diagnosis, earlier treatment and a better prognosis in each case. We used the latest available diagnostic technique to test the family but none was definitive. Now that we have discovered the gene for medullary cancer, we can invite the family members to come in for genetic testing. If they don’t have the gene, you don’t have to bring them back and test them again.

Now, apply that illustration to all diseases, factor in developments from the fields of pharmacogenomics and gene therapy, and you have your revolution. I think it will change the way we think and lead to an entirely different nomenclature for classifying disease in the same way that the Periodic Table revolutionized chemistry.

Q: Can you explain that analogy?

DR. GORMAN:
Before the Periodic Table, a chemical concoction was defined by a physical description — perhaps the leaves and bark of certain trees to produce a remedy for gout. The Periodic Table redefined the chemical world by determining that chemical properties of atoms can be predicted by their systematic relationship to one another.

Currently, we describe disease in leaves and bark. For example, in medullary thyroid cancer, the term “medullary” was applied because it looks a bit like brain under the microscope. “Thyroid” is an anatomic locator. But what is cancer? Cancer is a poorly regulated, disordered group of proliferating cells whose proliferation can be traced to one of many genetic influences.

In the future, we will describe a disease by its origin rather than its consequences. We will say that a certain gene is disordered by an inadequate promoter, or an excessive stimulator, or a deletion of some segment of it, or insertion of an inappropriate segment of another gene into it.

Q: And what will be the consequences of this new nomenclature?

DR. GORMAN:
It will change the way we think about disease. We will deal with the genetic initiator rather than its consequences and that will change treatment perspectives. Our concept of repair will be to fix the genetic initiators rather than intervening at a much later point. And, considering the possibility of antenatal testing, that brings the ethical, social and moral issues into question — at what point do you intervene in the course of managing an illness? We will have to rethink our responsibilities to the individual, to families and to the community.

Q: How will clinicians handle all of this new information?

DR. GORMAN:
Physicians will have to become acquainted with the genetic view of illness and, here at Mayo, we are already putting a strategy for educating our physicians into place.
Historically, we have always solved the problem of expanding medical knowledge by simplifying concepts and we will discard a lot of extraneous knowledge as we reinterpret it.

I would put this in the same category as the effort to make us computer literate. That’s a process that has been evolving for 15 years and I think it will be at least 15 years before we are adequately trained to meet this new challenge.

**Q:** Should clinicians be concerned about the projection that hundreds of new tests will be developed?

**DR. GORMAN:**

No. I think these concerns have been greatly exaggerated. We will still have a patient come to us and describe a set of symptoms. We will define the disease at any point in its evolution just as we always have.

If a person comes to us seeking genetic testing because someone in the family has been diagnosed with a medullary thyroid cancer, we will simply order a gene check for that disease. The laboratory service will send back a report. If it says they haven’t got the gene, we may determine a need for genetic counseling but, as far as medullary thyroid cancer is concerned, they’re out of the picture.

If the person has the gene, the report, for example, will say it is a dominant gene, or it is X-linked or not X-linked, or that its penetrance is typically 70 percent in a particular family. Most of the diagnosis will be presented to us and we will interpret it to the patient in the same way we have always done. Then we check other family members and, if they have the gene, we investigate the progression of their disease using current diagnostic techniques.

I think clinicians and laboratories will have greater interaction but it will be no different from getting a serum calcium and a parathyroid hormone level where the lab plots your patient’s results against normal values, tells you that persons in the left bottom quadrant of the plot typically have hyperparathyroidism, and recommends you consolidate the diagnosis with an imaging study.

**Q:** Clinicians treat many patients whose illness is affected by external factors. What should they make of the role of genetics in such diseases?

**DR. GORMAN:**

We will continue to evaluate both external and internal factors. If we have a patient with familial hypercholesterolemia, we know that his predisposition for myocardial infarction is increased by his smoking habit. We may use pharmacologic agents to lower the lipids. Perhaps we will use gene therapy to make the pharmacologic agents unnecessary. But we will still need to assist the patient in discontinuing smoking. So, the curtain does not fall on all the existing approaches to disease. For years to come, we can expect many of them to be more cost effective or safer than early genetic treatments.

Like the Internet that was supposed to change everything — it does and it doesn’t. Wonderful new ways of transmitting information have, indeed, changed many of the ways we educate and do business. There are powerful computers that inform and sometimes guide our choices but many business interactions are still best conducted face to face. So, I think, the human element will remain in genetics. Many of our day to day interactions with patients will be unchanged. What will be different, is the power of the genetic information that the physician will bring to that encounter.

**Q:** What about multi-gene illnesses?

**DR. GORMAN:**

Let’s suppose there are 10 genes that have each contributed 10 percent of the likelihood of you getting diabetes. That means we won’t be able to fix diabetes through genetic therapies for a very long time. In that case, drugs will be developed to deal with the final common pathway — insulin production and insulin resistance.

**Q:** Your attitude toward the genomics revolution seems to be a positive one. Is that perception accurate?

**DR. GORMAN:**

Yes, very positive — couldn’t be better. These will be exciting times to practice and Mayo will lead in the discovery and application of this exciting new information to the benefit of our patients.

Mayo is poised to make significant contributions to the translation of fundamental genomic information into enhanced patient care. Genomics science requires a team approach and medical information available in electronic form — both outstanding features at Mayo.

“Our organizational model has been developed as if we were preparing for this day,” says Dr. Weinshilboum.

“Failure to seize this opportunity would ultimately make it impossible for our successors to maintain the quality of the medical practice, medical research and medical education programs that our predecessors passed on to us.”

— Yvonne Hubmayr
The massive bronze doors that serve as the main entrance to Mayo Clinic’s ornate Plummer Building were closed Friday, Sept. 14, the first time this century, in continuation of a long-standing tradition to mark times of deep emotion in the lives of Mayo Clinic staff. The closing marked the National Day of Prayer and Remembrance in honor of the victims of the terrorist attacks on Sept. 11 involving aircraft in New York, Washington and Pennsylvania.

The doors of the building have rarely been closed in the 73 years of the building’s existence. During the 20th century, the doors were closed to mark the passing of the Mayo brothers and other clinic leaders. In 1963, they were closed in ceremonial recognition of President John F. Kennedy’s assassination.

Hugh Smith, M.D., chair of the Mayo Clinic Rochester Board of Governors, spoke briefly to the crowd of Mayo patients and staff, noting that these great doors have stood open as a welcome to people of all races and religions, colors and creeds. The doors have been closed only at times of great loss to Mayo, and the nation. He offered words of hope and healing in the aftermath of the tragedy, stressing the importance of justice, not revenge.

A crowd of more than 1,000 gathered at noon to watch as the doors were closed for 15 minutes and re-opened. The bells of the Rochester Carillon chimed prior to the closing of the doors, while Second Avenue Southwest in front of the Plummer Building was blocked off, allowing people to view the ceremonial closing of the doors. Many from the crowd proceeded into the Siebens Medical Education Building following the ceremony to participate in an interfaith service of prayer and remembrance. Concurrent services were held at Saint Marys Hospital and Rochester Methodist Hospital.

Richard Rivers and Merle Paxton, door attendants at Mayo Clinic, pushed the doors shut and re-opened them. Rivers called it an honor and said it was emotional standing at the closed doors looking out at the crowd. Later, the doors were closed for the weekend during which hundreds of people visited the site, some of whom left flowers and handwritten notes and prayers in memory of the dead. The doors were reopened Monday morning to symbolize Mayo’s continuing commitment to mutual respect as a medical center open to people from throughout the world.

The great doors are 16 feet tall, and 5-1/2 inches thick, each weighing 2 tons. Flour City Ornamental Iron Company of Minneapolis made the ornamental doors in 1928. Decorative squares, which are repeated several times on the doors, symbolize six Minnesota themes: education, domestic arts, mechanical arts, fine arts, science and agriculture.

Deaths that were marked by the closure of the doors include:
Dr. Henry S. Plummer, 1936;
Dr. Charles H. Mayo, 1939;
Dr. William J. Mayo, 1939; President John F. Kennedy, 1963; Dr. Donald C. Balfour, 1963; Dr. Charles W. Mayo, 1968; Harry J. Harwick, Mayo administrator, 1978. There is speculation, however, that other persons were honored: among those may have been Drs. E. Starr Judd and Joseph G. Mayo.
Day of Prayer and Remembrance

“All classes of patients, without regard to race or creed, social or financial standing, receive necessary care without discrimination.”

— Dr. William J. Mayo

More than 1,000 Mayo staff and patients attended the door closing after which Gonda Building construction workers created a small memorial beneath the American flag. During the following week the memorial grew as staff, visitors and patients added flowers, letters of prayer and mementos.
Alumni gather in Atlanta

The Swan House, designed in 1928 by noted classical architect Philip Trammel Shutze, provides a glimpse into the genteel and grandiose lifestyle of the early twentieth century industrialists and is a popular Atlanta tourist site.

General Co-chairs Dr. Doyt Conn left, and Dr. Martin Teem, right, both of Atlanta, pause to enjoy the spring weather with Medical Specialty Session Chair Dr. Roger Hofer, Mayo Clinic Rochester, during a session break.

Past association presidents gather to congratulate incoming president Dr. Christine Mroz. They are, from left to right, Dr. Joseph Romness, Dr. Gerald Bechamps, Dr. Mroz, Dr. Gordon Moore and Dr. Robert Jamplis.

Thomas Johnson Jr., former president of CNN News Group, current Mayo Clinic trustee and Doctors Mayo Society guest speaker, left, talks with longtime friend John Herrell, former Mayo Foundation chief administrative officer and the current chair of Mayo Foundation Investment Committee.
Mayo Medical Alumni Association
61st International Meeting

B lend the fragrance of
dogwoods, daffodils and azaleas in
colorful springtime display, a
historical setting and legendary
Southern hospitality and you have the
formula for a memorable experience.
Add to this an exceptional educational
program, internationally-prominent
speakers and ample time for social
and leisure activities and you begin to
appreciate the opportunities enjoyed
by alumni attending the 61st
International Meeting held April 19-21
at the Grand Hyatt Atlanta in
Buckhead, Ga.

Warm welcome

Association President Gerald
Bechamps, M.D., together with fellow
officers, welcomed guests on
Wednesday evening at a relaxed
opening reception. Sampling an array
of Southern-style hors d’oeuvres,
alumni savored the time to catch up
with old friends, make new
introductions and expand their
contacts with Mayo colleagues.

Organizing the International
Meeting is a collaborative effort with
many alumni contributors. This year,
General Co-Chairs Martin Teem, M.D.,
and Doyt Conn, M.D., of Atlanta
graciously hosted the biannual
gathering, while Roger Hofer, M.D., of
Mayo Clinic Rochester served as
Medical Specialty Session Chair. In all,
300 guests, including 230 alumni
participated in the meeting.

Mayo update, space and the
American spirit

The General Session opened
Thursday morning with a greeting
from Dr. Bechamps, who introduced
the morning’s first speaker, Michael
Wood, M.D., president and CEO of
Mayo Foundation.

Dr. Wood first shared a brief
historical overview of the formation
of Mayo Foundation. One of the first
non-profit organizations established
in the country, Mayo Foundation’s
heritage, he noted, is based on
philanthropy. In 1919, Drs. Will and
Charlie Mayo and their practice
partners turned over all the assets of
their practice to a new Foundation,
called at that time Mayo Properties
Association, and began the Mayo
tradition of working on a salaried
basis. “The corpus and spirit of this
endowment persists today and is
tangible evidence of the importance
Drs. Will and Charlie Mayo placed on
medical education and research as
inseparable from what quality health
care should be,” said Dr. Wood.

Touching on several milestones in
Mayo’s past, Dr. Wood described the
organization’s evolution from a
solitary specialized medical center to
a multi-faceted, integrated, health
care delivery system. A system that
today includes three major practices,
several regional clinics and hospitals
and serves more than 500,000 patients
annually from throughout the nation
and world. Mayo Foundation

Dr. Umberto Squarcia, of Parma,
Italy, and Dr. Stephen Harner,
Mayo Clinic Rochester, are joined
by a John Wayne look-alike during
the President’s Dinner and Dance
held at the historic Fox Theatre.
employs nearly 38,000 people, including 2,378 physicians and 280 research scientists. More than 1,800 students, residents and fellows participate in Mayo’s education programs.

Mayo’s growth has been sustained, Dr. Wood said, by its unwavering commitment to meeting the needs of the patient through integrated practice, education and research. “We are fortunate to be able to keep this focus well clarified because Mayo has no owners, no partners and no shareholders. (For additional comments, see “Dr. Wood reflects on Mayo and the future” on page 16.)

Thursday’s general session also included the presentation “America’s Health Care System: An Optimistic View of the Future” by Past President and CEO of Mayo Foundation Robert Waller, M.D. Dr. Waller eloquently illustrated how the tremendous medical and scientific advances and opportunities to improve the system make today an exciting time to practice medicine. Updates were given on progress at Mayo Clinic’s practices by Denis Cortese, M.D., chair of the Mayo Clinic Jacksonville Board of Governors, Michael O’Sullivan, M.D., chair of the Mayo Clinic Scottsdale Board of Governors, Hugh Smith, M.D., chair of the Mayo Clinic Rochester Board of Governors and Peter Carreyer, M.D., chair, operations for Mayo Health System.

Mayo alumnus, Bernard Harris Jr., M.D., presented the Judd-Plummer Lecture “The Physician of the Future: Space and Beyond,” in which he engaged and entertained the audience with visions of the coming era of space medicine and accounts of his personal experiences as a NASA astronaut. (See Dr. Harris’ profile on page 22.)

Elizabeth Dole, former president of the American Red Cross, presidential candidate and now Republican U.S. Senate candidate from North Carolina, received an enthusiastic welcome from alumni and family members who filled the lecture hall. Her presentation, “An America We Can Be,” concluded the morning’s presentations and was an inspiring, entertaining, personal portrait through which she shared several moving and, at times, humorous experiences of her administrative and political career and life with her husband, former U.S. Sen. Robert Dole. Mrs. Dole challenged the audience to envision an America that places a priority on the common good, particularly the needs of children, to become actively involved in the political process and help lead the nation to a better future.

That evening, alumni and their families visited the Fernbank Museum of Natural History for a gala buffet, complete with dinosaur motif and exotic, tropical flower arrangements. The “world music” acoustic sounds of the band, Sapien, contributed to a casual atmosphere of adventure in which anything was possible, including a guest
appearance by Fred and Wilma Flintstone along with neighbors Barney and Betty Rubble. The evening was capped with an I-Max Theatre viewing of *The World’s Greatest Places*.

**Professionalism in medicine**

Friday’s General Session centered on the theme of professionalism in medicine. Presentations explored methods of teaching and evaluating professionalism in medical students and residents and maintaining physician professionalism in today’s stressful, demanding, health care environment.

John Stobo, M.D., president of the University of Texas Medical Branch and Linda Blank, vice president for Clinical Competence and Communications of the American Board of Internal Medicine, presented the Raymond Pruitt Lecture. Their presentations, titled “Professionalism In The 21st Century: Reaffirming The Social Contract” and “Professionalism in Medicine: Is It Time For a New Social Contract” respectively, offered alumni an articulate vision of the past, present and potential future of the physician-patient relationship.

Chronicling the history of the social contract between physicians and American society, Dr. Stobo revealed how the contract was established in the early 1900s and how, today, it is threatened by several eroding influences. Ms. Blank then outlined a new program called the Medical Professionalism Project 2001 that has been developed by a collaboration of physician organizations to help reestablish and strengthen the social contract and restore physician-patient trust. (See “Preserving the ‘timeless moment’ – a call to renew the social contract” on page 18 for a comprehensive review of this program.)
The Doctors Mayo Society

The Doctors Mayo Society held its annual meeting Friday evening, at which Thomas Johnson Jr., chair, president and chief executive officer of CNN News Group (who retired in late June) and a member of the Mayo Foundation Board of Trustees was honored as keynote speaker.

Johnson focused his presentation on medicine and the media, noting that medicine is the number one topic of interest to the public today. Last year, he said, 41 million people turned to the Internet for health information and that number is expected to grow to 88 million or more by 2005. “Traditional medicine — once described as doctor’s orders — is being transformed. Today, the patient who comes to you is well-armed, better informed or more misinformed than ever.” Johnson noted that Web sites vary greatly in quality and integrity, and that MayoClinic.com is, in his opinion, the best health information Web site.

“The lesson for you that I read out of this,” Johnson said, “is that doctors must ‘get wired.’ Your patient of tomorrow no longer will be passive. He or she will be ‘activated,’ as some experts describe, empowered with more information than ever before, including some that may be incorrect.”

Johnson stressed the importance of close communications between the media and physicians, particularly

Nominating Committee reports new board members

Outgoing board members were recognized and new board members were elected to the Mayo Medical Alumni Association at its international meeting in Atlanta.

Outgoing board members of the Association are:

Ray Allen, M.D., Liberal, Kan.
H. William Allred, M.D., Tulsa, Okla.
Karen Kronman, M.D., Madison, Wis.
Marc Mariani, M.D., Salt Lake City
Floyd Willis, M.D., Jacksonville, Fla.
Gordon Moore, M.D., Rochester, Minn.
Susan Wynn, M.D., Fort Worth, Texas

Incoming board members are:

David Baines, M.D., Seattle
Jaime Laventman, M.D., Tecamachalco, Mexico
Charles McPherson, M.D., Henderson, Nev.
Kristina Rother, M.D., Kensington, Md.
Elizabeth Shuster, M.D., Jacksonville, Fla.
Robert Wooten, M.D., Memphis, Tenn.
Thomas Daugherty, M.D., Winchester, Va., will complete the unexpired term of Robert Adams, M.D., San Diego, who resigned from the board due to illness.

Dr. Robert and Rebecca Nesse, Mayo Clinic Rochester, sample the delicious buffet at the Fernbank Museum. Above, dining among the dinosaurs.
those trained by Mayo, to ensure the accuracy of medical news. “The importance of good medical coverage and science coverage in mainstream journalism cannot be overstated,” he said. “It cannot be ignored. It cannot be left unspoken. Like the lifesaving help a patient finds on the Internet, that kind of coverage will keep our profession healthy and strong. I speak not only for CNN, but for an entire profession, when I ask you to help us provide it,” he stated.

Concluding presentations

Saturday’s General Session presentations encompassed a variety of interesting and timely topics, including advances in xenotransplantation with their attendant ethical implications, the physician and the Internet, and a presentation on The Carter Center by Gordon Streeb, Ph.D, the center’s associate executive director for peace programs.

The meeting concluded with the President’s Dinner and Dance at the historic Fox Theatre in downtown Atlanta. Alumni and guests were entertained by look-alike “stars” of the past, including Marilyn Monroe, Clark Gable and John Wayne, and danced to classic rhythm and blues and soul tunes performed by U.S. Beat.

During the event, outgoing president Dr. Bechamps presented the president’s medallion to Christine Mroz, M.D., Memphis, Tenn., the association’s new president, who will serve two years. Other officers include T. Paul O’Donovan, M.D., president-elect; Scott Litin, M.D., vice president; and David Herman, M.D., who will continue serving as secretary-treasurer.

The next international alumni meeting is planned to coincide with the opening ceremonies for the new Gonda Building at Mayo Clinic Rochester, Oct. 12-14. The General Session theme is medical genomics for the practicing physician.

— David Kolbert
Dr. Michael Wood reflects on Mayo and the future

In his address, “Mayo Foundation: A Look to the Future,” to alumni in Atlanta recently, Michael Wood, M.D., president and CEO of Mayo Foundation discussed the perceptions that the public holds about Mayo Clinic as revealed through recent surveys and outlined Mayo’s response to major trends destined to shape health care in the near future.

“Patient care is and consistently has been the organization’s primary focus, and we recognize that excellence in patient care as propagated by word-of-mouth advertising is the most important driver of the Mayo Clinic reputation,” Dr. Wood said. In recent years, Mayo has sought to understand what this means in terms of brand management. Several valuable insights have been learned.

“Mayo Clinic” is readily recognized by a large number of Americans. “What is remarkable is that in a 48-state random survey, 83 percent of Americans have heard of Mayo Clinic and nearly 30 percent either have personally been to or have a family member or friend who has been to one of the three Mayo Clinics,” he said. “There is no other health care institution in this country with that broad a personal contact with the public at large.”

From studies, based on public perception, the Mayo Clinic brand boils down to four elements:

• **Excellence**: the best medical, personal and technical expertise in patient care and education

• **Care**: compassionate patient care and education resulting in physical, mental and emotional well-being

• **Cooperation**: care and education in cooperative relationship with patient, family and consumers

• **Enlightenment (Wisdom)**: pioneering knowledge, insight and truth through research and education.

“We recognize that our brand is built on dealing with sickness, complex medical problems and subspecialty health care,” said Dr. Wood. “It is for this reason that we need to focus on the type of care that is not available ‘at home.’ Our expertise is the medical problem that might be viewed as life-threatening, or the unusual problem that requires a team of specialists collaborating on a single patient.”

### Future trends:

Cautioning that it is difficult to predict the future, Dr. Wood discussed the predominant health care trends and how Mayo is responding to each. Acknowledging that other trends are certain to emerge, Dr. Wood highlighted the following five he believes are certain to evolve:

#### Inadequate medical workforce:

The aging population, an increase in the rate of part-time practice patterns and early retirement, as well as declining medical school applications will drive the need for more primary and specialty physicians. Shortages of some allied health care workers are already evident and certain to continue over the next decade. It is currently projected that by 2010 more than 40 percent of registered nurses will be older than 50 and looking toward retirement, he said.

Dr. Wood indicated that Mayo is addressing this trend by expanding its education programs for graduate medical education and allied health care. Since 1993, 200 additional residents and fellows and 47 new programs have been added. Twenty-nine allied health programs are now offered. Declining federal support for medical education, however, threatens this growth. In response, Mayo is promoting a stabilization of Medicare Direct and Indirect Graduate Medical Education reimbursement at current levels. Mayo is also implementing creative programs to protect teaching time and increase staff retention.
Aging of the population:

In the decade from 2010-2020, more than 50 percent of our population growth will be Americans older than 65, due to the baby boomers becoming senior citizens and the increase in U.S. life expectancy. Within 30 years, both the population over 65 and over 85 will nearly double. The fact that consumption of health care services for those over 65 is three-fold greater than for those under 65 will dramatically increase the need for physicians, allied health care staff, hospitals and nursing homes.

In addition to expanding education programs, Dr. Wood said Mayo is preparing by developing enhanced capabilities in quality of life programs for the elderly. This includes growth in the areas of ophthalmology, urology and gynecology, cosmetic surgery, joint arthroplasty and the prevention and treatment of neurodegenerative disorders. Mayo is also emphasizing growth of programs that impact life expectancy, such as treatment for coronary disease and congestive heart failure, new techniques for vascular reconstruction, cancer prevention and treatment, and chronic disease virtual management by employing interactive information systems and in-home monitoring.

Genomic advances:

Dr. Wood said that Francis Collins, director of the NIH National Genome Research Institute, predicts the timeline for incorporating genomics-related technologies into routine health care might look as follows:

- In the present decade genetic tests will be developed which will routinely predict individual susceptibility to disease.
- By 2020, we can expect that novel receptor-specific drugs will be available for common conditions such as diabetes, cancer and hypertension and a wide array of very specific diagnostic tests will be in routine use.
- By 2050, comprehensive genomics-based health care will be the norm in advanced societies and many potential diseases will be prevented or cured at the molecular level.

Mayo is responding to the exciting opportunities that genomics may promise with the creation of the Genomics Research Center to advance research priorities in genomics and proteomics. (See article titled “Genomics: The emergence of a profound and fundamental transformation of medicine” on page two for further information on Mayo’s plans to integrate genomics into its medical practice, education and research.)

Declining net patient care revenues:

This continuation of the present trend is attributable to relatively flat reimbursement rates, continued increased costs, increased regulation and the mandate to improve service and quality, according to Dr. Wood. Over the past decade, efforts have been implemented to retard the growth of health care costs. Such measures include Medicare and Medicaid price controls and attempts to curtail utilization and reimbursement by managed care organizations. Despite efforts to curtail increased costs, health care costs continue to grow at rates most believe are unsustainable.

Mayo is continuously improving service and quality, which reduces costs and engenders patient loyalty. It is specifically approaching the problem on four fronts: improving reimbursements by signing only realistic contracts; leveraging its electronic medical record to ensure accurate recognition of billable services; focusing patient access on those patients Mayo is most likely to help — complex or tertiary care patients. In addition, Mayo is reducing expenses by increasing efficiency through greater use of electronic records, practice standardization, supply/expense management and investment in efficient modern facilities and equipment. Finally, Mayo is proactively participating in the legislative process to help shape regulations.

Medical consumerism:

Patients are increasingly becoming more conscientious consumers of health care services. Dr. Wood believes this is the result of growing personal accountability for one’s own health, an increasing demand for accurate, reliable health information and the public’s increased awareness of medical errors.

Mayo is responding to these concerns in a number of ways, perhaps the most important of which is a reaffirmation of the Mayo Model of Care. Its elements include adequate time with the patient; a defined doctor in charge; multi-specialty teamwork; a thorough explanation of the diagnoses and therapies; and timely, comprehensive communication and cooperation with the home physician. Mayo also is expanding its facilities to meet patient access demands and is a recognized leader in the creation of reliable health information.

Dr. Wood concluded his remarks stating that, “Mayo Clinic must adapt to a changing world, anticipate and respond to future trends, and strive to pass on the Mayo legacy.”

— David Kolbert
Preserving the “timeless moment” – a call to renew the social contract

The physician sits facing her patient.
Unhurried and with great empathy, she explains the results of his tests and treatment options. She listens carefully to his concerns and answers his questions honestly. Together, the two decide what comes next, what course to follow to help him get well. Such is the “timeless moment,” that encapsulates the relationship of trust so valued by patients and physicians.

Many in medicine today have expressed concern that a financially stressed health care system and other societal factors threaten this relationship. Some are beginning to closely analyze the problems and define what must be done to preserve and strengthen the vital bond between physicians and patients.

John Stobo, M.D., president of the University of Texas Medical Branch, Galveston, and Linda Blank, vice president for Clinical Competence and Communications for the American Board of Internal Medicine (ABIM), addressed this important issue during the Raymond Pruitt Lecture at the 61st International Meeting of the Mayo Medical Alumni Association in Atlanta. In presentations respectively titled “Professionalism in the 21st Century: Reaffirming the Social Contract” and “Professionalism in Medicine: Is It Time for a New Social Contract?” Dr. Stobo and Blank presented a positive call to action, challenging Mayo alumni to carefully consider opportunities to improve the practice of medicine and outlining recent efforts to establish a Physician Charter on Medical Professionalism.

Looking back to look forward

Dr. Stobo, who also serves as chair of the American Board of Internal Medicine Foundation Board of Trustees, framed a discussion of the factors undermining current medical professionalism and the health care industry by examining the historical development of medical education in the early 1900s.

Dr. Stobo told audience members that, though controversial, Abraham Flexner’s 1910 report, “Medical Education in the United States and Canada,” led to a remarkable transformation in medical education, and in turn, in the medical profession during the early 1900s. Advances at the time included the development of licensure and certification standards, the rise of philanthropic support for academic medical centers, the commitment of academic medical centers to serving the poor and use of the Hippocratic Oath in medical education.

He explained that these changes — led from within the profession by great leaders — helped to establish standards of professionalism and resulted in “an implicit contract between American medicine and society.” This, Dr. Stobo said, helped to establish the public’s view of medicine as an altruistic profession. As such, the profession and its practitioners were afforded privileges of status, autonomy and self-regulation.

But this contract, he asserted, has eroded with time as physicians and the practice of medicine have faced a variety of pressures, including:

- Conflict between self-interest and the obligation to serve society
- Publicity over medical errors
- Erosion of time between a physician and the patient
- Imperfect self-regulation
- The unmet needs of the under-served
- A decline of passionate leaders in the profession

Whether from society, the profession or the marketplace, these pressures “are some of the storm clouds threatening the contract, the covenant we have with society,” Dr. Stobo told alumni. As in the early 1900s, he concluded, today’s physicians must step forward to help shape the future of the profession from within, “It’s time for us as a profession to take charge and reaffirm our contract with society.”
Writing a charter for tomorrow

During the second half of the lecture, Blank shared an overview of one recent physician-led effort to help shape the profession and ensure continued trust in the patient-physician relationship.

The project, called the Medical Professionalism Project 2001, is an innovative collaboration between the ABIM Foundation, the American College of Physicians-American Society of Internal Medicine (ACP-ASIM) Foundation and the European Federation of Internal Medicine (EFIM). It was started in 1999 to evaluate common issues of professionalism and set a course for reform.

Members of the project, she said, agreed that professionalism is the basis of medicine’s contract with society, and as such, must be defined. The membership’s effort to draft a definition led to the development of a Physician Charter on Medical Professionalism intended to encourage dedication to professionalism. Blank explained that project members are currently sharing the charter with physician groups in the United States, Canada and Europe, seeking ideas for how to realize the potential of a charter.

She continued, describing the following fundamental principles set forth in the charter:

• Primacy of patient welfare: Dedication to the patient interest is essential to maintaining public trust.
• Patient autonomy: In respecting patient autonomy, physicians must be honest with patients and empower them to make informed decisions about treatment.
• Social justice: The medical profession must promote justice in the health care system and work to eliminate discrimination in health care.

In addition to these principles, Blank described a set of ten professional responsibilities to which all physicians should be committed. Responsibilities identified in the charter include:

• Professional competence
• Honesty with patients
• Patient confidentiality
• Maintenance of appropriate relations with patients
• Improvement of the quality of care
• Improvement of access to care
• Just distribution of scarce resources
• Scientific knowledge
• Resolution of conflicts of interest
• Professional participation in the processes of self-regulation

Commitment to the principles laid out in the Physician Charter on Medical Professionalism, “is a way of translating idealism into action,” Blank concluded.

— Jenna Rosenberg
The Mayo Clinic Model of Care —

preserving Mayo’s unique practice environment

Like the three professional groups in the Medical Professionalism Project 2001, Mayo Clinic recognizes that pressures in the health care environment have the potential to change patient-physician relationships.

In 1998, Mayo physicians, unwilling to see incremental policy changes erode Mayo’s practice model, evaluated what makes Mayo’s patient care environment unique. Their work resulted in the creation of the Mayo Clinic Model of Care. The document will serve as a benchmark in the years to come to help Mayo ensure its valued patient-physician relationships.

Grounded in Mayo’s history and culture, the Mayo Clinic Model of Care reminds staff that the primary focus, meeting the needs of the patient, is accomplished by embracing the following core elements (attributes) of Mayo’s practice environment:

Patient Care
- Collegial, cooperative, staff teamwork with true multi-specialty integration
- An unhurried examination with time to listen to the patient
- Physicians taking personal responsibility for directing patient care over time in a partnership with the local physician
- Highest quality patient care provided with compassion and trust
- Respect for the patient, family and the patient’s local physician
- Comprehensive evaluation with timely, efficient assessment and treatment
- Availability of the most advanced, innovative diagnostic and therapeutic technology and techniques

The Mayo Environment
- Highest quality staff mentored in the culture of Mayo and valued for their contributions
- Valued professional allied health staff with a strong work ethic, special expertise and devotion to Mayo
- A scholarly environment of research and education
- Physician leadership
- Integrated medical record with common support services for all outpatients and inpatients
- Professional compensation that allows a focus on quality, not quantity
- Unique professional dress, decorum and facilities
Shooting for the stars:
he sky seems vast and the stars look brighter in the night sky of northwest New Mexico. At least it seemed that way to a young Bernard Harris Jr., as he stood in his backyard in Tohatchi, N.M., looking skyward, dreaming of being an astronaut.

He was like many children who stared at the stars in the night sky and dreamed of becoming space explorers. While for most, the dream fades as the years pass, for Bernard, his childhood dream remained and grew clearer as he pursued his education. With his sights set skyward, he gained his medical degree at Texas Tech University, a Masters in Biomedical Science from the University of Texas Medical Branch, and he completed an internal medicine residency at Mayo Clinic.

In time, the dream became reality and Dr. Harris achieved his vision of becoming an astronaut. He logged 438 hours in space and traveled 7.2 million miles while circling the Earth on two space shuttle missions, serving as payload commander on one flight, and becoming the first African-American to walk in space. Such is the power of dreams.

During the journey to these accomplishments, Dr. Harris has become an eloquent spokesperson for space medicine and a nationally recognized teacher and mentor.

Focused on flight

As he progressed, he learned to adapt his plan along the way as new opportunities were presented. Upon graduating from high school, he chose medicine as the best path upon which to pursue his goal. Medicine combined the aspect of helping people, which complemented his personal values, with his desire to become an astronaut. So he studied biology at the University of Houston, then entered medical school at Texas Tech University.

Growing up with expectations

The Harris family has a tradition of setting goals and achieving them. His great-grandfather was a child of a slave who moved to east Texas from North Carolina, where several family members became teachers and ministers. His family even owned the first Model T Ford in the community.

Born in Temple, Texas, he spent his first six years in eastern Texas until he moved to the Navajo Nation with his mother, a teacher, first living in Arizona and eventually moving to New Mexico. Having goals was an expectation in the Harris household and young Bernard set his by age eight.

At the time, the space race between the United States and the Soviet Union was in full swing, Dr. Harris explains, so “we dreamed about flying in those days.”

When his family moved from New Mexico to San Antonio during his high school years, he began to seriously analyze his goal. “I looked at each step and what it would take to move forward,” Dr. Harris says. “As I was completing that step, I looked to the next.” The first goal, he knew, was to attend college.

Even with a well thought-out plan, Dr. Harris couldn’t deny his goal was set high. “My first challenge was very visible,” Dr. Harris says. “When I looked at the faces of those astronauts on the first lunar landing, I didn’t see one the color of mine. I later learned that there were many people of color, African-Americans, Asians, Hispanics, working as scientists and engineers behind the scenes. Of course, now the space program has grown to include everyone.”

“…I didn’t see one the color of mine. I later learned that there were many people of color, African-Americans, Asians, Hispanics, working as scientists and engineers behind the scenes. Of course, now the space program has grown to include everyone.”

— Bernard Harris Jr., M.D.
When it came time to seek a residency, Dr. Harris looked for a program with strong connections to the space program. Mayo Clinic was his choice. Mayo’s involvement in space medicine dates back to experiments with the human centrifuge during the 1940s and later the development of the modern pressurized space suit.

During his residency, Dr. Harris worked on a project investigating the risk factors for osteoporosis with B. Lawrence Riggs, M.D., now program director of the Mayo General Clinical Research Center in Rochester, and Lawrence Melton, M.D.

“He was completely focused on becoming an astronaut and knew of the importance of bone loss as a major limitation of interplanetary space travel,” Dr. Riggs says. “I was most impressed by his dedication and focus.”

Indeed. Pasquale Palumbo, M.D., an endocrinologist at Mayo Clinic Scottsdale, remembers Dr. Harris’ quality work. “When Dr. Harris said he would do or accomplish a task or assignment, he accomplished it well,” Dr. Palumbo says. “He never disappointed you.”

After completing his internal medicine residency training at Mayo in 1985, Dr. Harris continued his work focused toward becoming an astronaut. He completed a National Research Council Fellowship at the National Aeronautics and Space Administration (NASA) Ames Research Center, Moffett Field, Calif. While at Ames, he conducted research in the field of musculoskeletal physiology and disuse osteoporosis, completing his fellowship in 1987. He then joined NASA Johnson Space Center as a clinical scientist and flight surgeon. His duties included clinical investigations of space adaptation and the development of countermeasures for extended duration space flight.

In 1991, he became an astronaut. Flying aboard the Space Shuttle Columbia, he was a mission specialist on STS-55 (April 26 to May 6, 1993), and was the payload commander on STS-63 (Feb. 2 to 11, 1995). STS-63 was aboard the Space Shuttle Discovery and was the first flight of the new joint Russian-American Space Program, which included the rendezvous with the Russian Space Station, Mir. Dr. Harris became the first African-American to walk in space during the deployment and retrieval of Spartan 204, an astronomy satellite.

NASA established the first-ever videoconference between outer space and a medical institution when Dr. Harris linked with Mayo Clinic from space in a videoconference during his first shuttle flight. Its purpose was to learn about the effects of zero gravity on physical examinations and to highlight the field of telemedicine.

Ed Rosenow, M.D., a mentor of Dr. Harris’ during his residency remembered the event with excitement.

“After a few anxious moments as our audiovisual people worked on the connection with Houston, Bernard’s face suddenly appeared on the full screen, at which point the audience gasped in excitement,” Dr. Rosenow says. “It was an exciting moment.”

Mayo physicians asked questions of Dr. Harris during the 15-minute videoconference as others in Rochester, Jacksonville and Scottsdale watched and listened.

Today, a question about his walk in space immediately coaxes a smile from Dr. Harris more than six years later. He recounted some of that experience in April when he delivered the Judd-Plummer Lecture at the 61st International Meeting of the Mayo Medical Alumni Association in Atlanta.
The launch of the space shuttle is one of such force that “when those babies light (the shuttle main engines) nothing is going to hold you to this planet,” Dr. Harris says.

And despite trying to calm himself, his heart monitor measured a leap from 80 beats per minute to 160 as he opened the shuttle’s hatch to walk in space.

Attached to a robotic arm while retrieving a payload, Dr. Harris said he and a partner witnessed sunrises and sunsets within the span of 90 minutes as they traveled at 18,000 mph and the temperature outside their space suits was minus 185 Fahrenheit. The weightless nature of space meant they could move the 3,500-pound satellites and modules around with only two fingers. “But I had to be careful. If I moved it too quickly, I could hit my partner and knock him out into space.”

Despite the highly structured schedule, there was some time to reflect and admire the beauty of the planet 250 miles below, Dr. Harris says.

“There was a time during the mission just before bedtime that was free, and we were floating over the West Coast; you could see Seattle,” Dr. Harris says. “We turned down all of the lights inside and watched a great show of the Northern Lights or Aurora Borealis.”

Teaching others to dream

For Dr. Harris, it began with the ability to dream and envision a goal. Sounds simple enough, but it’s an ability Dr. Harris has discovered isn’t always present in young people,

Dr. Bernard Harris Jr. and crewmates during a space shuttle mission. Dr. Harris has logged more than 7.2 million miles in space.
particularly those who come from disadvantaged backgrounds, or who have run afoul of the law. So Dr. Harris has taken his story and his philosophy to these children in the hopes that they begin to think about their futures.

“These kids cannot see themselves in the future,” Dr. Harris says.

This realization was stunning and alarming to Dr. Harris as he sat and talked with youngsters at a juvenile detention center in Houston, Texas, who had no goals, no dreams.

Encouraging these kids to see the value of education and how it might help them achieve dreams became the mission of Dr. Harris.

He’s begun to change those minds with two programs. The first, Dare to Dream, aims at elementary students.

“We show them that we all have abilities and can dream,” Dr. Harris says. “Those dreams can turn into so many things. We have people share their stories about their work, such as engineers, police officers, people from many different professions.”

In the second program, Summer Science Camp, Dr. Harris teamed with the University of Houston to expose middle school students to accelerated math and science through activities and discussions with professors and college students.

In 1995, budget cuts threatened to stop the science program, but Dr. Harris responded. He looked for a way to continue the program and started a foundation, personally supporting the activity until additional funding could be secured.

The Harris Foundation, started by Dr. Harris and his wife, Sandra, a project manager for a national title insurance company, is a non-profit organization that helps him raise funds for the programs and branch into new ones that help young people. The foundation supports math, science and crime prevention programs for America’s youth.

Dr. Harris received the 2000 Horatio Alger Award for his efforts.

David Claypool, M.D., an emergency services physician at Mayo Clinic Rochester, was a resident in internal medicine at the same time Dr. Harris was a resident. The two men came from modest backgrounds and were trying to improve their futures through work and education.

Their friendship and admiration has continued long after their residencies. Dr. Claypool says Dr. Harris continues to use the skills he has to improve the lives of many.

“He means what he says, and demonstrates his ideals through example,” Dr. Claypool says. “I have had the pleasure of seeing him work to inspire the young school children in Houston, doing the work of his foundation. He has a gift for inspiring these children, and helping them have a dream that they can turn into goals and into success. His work will change the lives of many of these children. I have seen him do the same with many adults when he speaks at various conferences. He does that for me through our friendship.”

“Many of these kids have never been on a college campus,” Dr. Harris says. “You see a transition in them from the beginning of the program to the end. We have a very regimented schedule that exposes them to many positive things. We teach them how to learn and show them the positive results of learning through mentorship. And I want to force them to think about setting goals. I tell them I won’t hold you to these, but I want you to have something in mind and to have at least a direction to go.”

New dreams, future goals

What’s next after you’ve flown in space? Lots of things.

Dr. Harris is training for a marathon. He’s approached it the same way he approaches many tasks. He seeks information from others, reads and learns and then outlines his approach to the goal. The Houston Marathon is his target and he’s been building up his training runs little by little as he prepares his body for the 26.2-mile race.
Dr. Bernard Harris Jr. presents an award to a young participant in his Dare to Dream program for elementary students. The patch for the program reflects Dr. Harris’ love of space.

With the recent completion of his MBA, Dr. Harris has begun another dream. In January, he started a new business venture called PBI Ventures, a company that invests in start-up companies in the area of medical informatics and advanced technology, such as telecommunications, biosensors and non-invasive devices.

He continues to advocate for the country’s continued involvement in space. Space medicine will become a field of its own, he predicts. “Just as you have internal medicine, you’ll eventually see space medicine as a specialized area that will be studied,” says Dr. Harris.

And there is interest in the field of space medicine, especially among students. In Atlanta, three Mayo residents attending the alumni meeting spoke to him about their interest in space medicine.

Dr. Harris says Mayo Clinic is well positioned for the future to benefit and participate in space-related experiments and medical developments that result.

“Mayo has international ties, it trains international physicians and its name has instant credibility throughout the world,” he says. “Mayo has always been a visionary institution and it will be a natural to partner with others.”

The international aspect of Dr. Harris’ new venture has driven home to him the need to understand other languages and cultures. His daughter, Brooke Alexandria, 9, attends an international school, where she is learning multiple languages.

“When we went to Spain recently for business, she was the interpreter for Dad,” Dr. Harris says.

So as Dr. Harris continues to find new challenges and goals, he continues to spread his message.

“We’ve all been given abilities and have dreams,” Dr. Harris says. “We have more than one ability... and when you exploit them, they become your strengths, allowing you to accomplish your dreams.”

— Michael Dougherty
Mayo Foundation honors new named professors

Two Mayo Clinic Rochester physicians were honored with Mayo Medical School named professorships at the Mayo Foundation Board of Trustees annual meeting in May.

Gregory Gores, M.D., a Mayo Clinic gastroenterologist, was awarded the Reuben R. Eisenberg Professorship. Dr. Gores is vice chair of the Division of Gastroenterology and Hepatology, and professor of medicine and associate professor of physiology and biophysics at Mayo Medical School. He received his medical degree at the University of North Dakota in Grand Forks and completed his residency at the Mayo Graduate School of Medicine. Dr. Gores received the Method to Extend Research in Time (MERIT) award in 2000 from the National Institutes of Health. He is currently investigating the mechanisms of liver cell injury and carcinogenesis in biliary epithelia.

Scott Kaufmann, M.D., Ph.D., a Mayo Clinic oncology researcher, was named the Helen C. Levitt Professor. Dr. Kaufmann is a professor of pharmacology and medicine at Mayo Medical School. He received his medical degree and Ph.D. from Johns Hopkins University in Baltimore, where he also completed his residency and oncology fellowship. He joined the staff of Mayo Clinic Rochester in 1994. His laboratory provided some of the first evidence that anticancer drugs cause cancer cells to commit suicide. Dr. Kaufmann and his collaborators continue to investigate the biochemical basis of this effect.

Nominations for Balfour and Kendall research awards

Mayo Medical Alumni Association members are encouraged to submit nominations for the 2002 Donald C. Balfour and Edward C. Kendall awards for meritorious research. Nominations will be accepted until Dec. 31.

The Balfour Award recognizes outstanding research by a resident of Mayo Graduate School of Medicine whose primary training is in a clinical field. The Kendall Award recognizes outstanding research by a postdoctoral fellow or research associate who is within five years of having received their degree and whose research being considered for the award was completed during their first postdoctoral fellowship.

Any Mayo Medical Alumni Association member may nominate candidates by writing to Carol Demulling, Mayo Medical Alumni Association, Mayo Clinic, 200 First Street SW, Rochester, MN 55905; by calling 507-284-2317 or e-mailing alumni.affairs@mayo.edu.

Nominations must include a summary of the attributes of the alumnus or alumna, a copy of the individual’s curriculum vitae and supporting letters. Three letters are recommended and they may come from both alumni and non-alumni.

Award recipients will be honored during commencement ceremonies in May 2002.

Laboratory study shows measles vaccine may offer novel approach for treating lymphoma

The virus strain used worldwide for more than 30 years to produce the measles vaccine may be effective for another purpose: fighting lymphoma. Scientists with Mayo Clinic’s molecular medicine program have found that the measles vaccine virus caused remission of lymphoma in mice injected with human cells containing the cancer. The findings from the study are published in the June 15 issue of Blood, journal of the American Society of Hematology.
This laboratory study is thought to be the first research conducted by any medical research institution to demonstrate the destructive effects of the measles vaccine virus on lymphoma cells. It is one of several research studies underway at Mayo Clinic to investigate the effects of the measles vaccine virus on cancer.

Adele Fielding, M.D., Ph.D., lead researcher on the Mayo Clinic study, describes the findings as an early step in potentially developing the measles vaccine virus into a treatment for patients with advanced lymphomas.

“Our research involved the use of derivatives of the Edmonston-B strain of the measles vaccine to study its effects on both aggressive and slow-growing B-cell lymphoma,” says Dr. Fielding.

“We found that injecting the vaccine strain of the virus into the tumor caused remission of the large, established human B-cell lymphoma in laboratory mice with the cancer,” she said. “Intravenous administration of the vaccine strain also resulted in considerable slowing of tumor progression in the mice.”

A pilot study is now underway at Mayo Clinic to test the use of the live measles vaccine virus in patients diagnosed with lymphoma.

“If our laboratory findings translate to patients, then our research may lead to another treatment for patients who have failed current therapies for lymphoma and have exhausted their options for fighting the disease,” says Dr. Fielding.

Letter from the Secretary-Treasurer

After several years of anticipation and planning, the Gonda Building at Mayo Clinic Rochester will open this month, culminating years of dreaming, planning, designing and building the facility that will house the medical practice of the future. With so much emphasis on the “bricks and mortar” of the practice, we sometimes need the gentle reminder that the practice of medicine is much more that the quality or design of the facility.

To use a modification of the realtor’s rule, “location, location, location,” the rule of the practice of medicine is “People, People, People.”

Although one can come into Rochester, or any of the other practice sites, point to the buildings and state, “There’s the Mayo Clinic,” the real Mayo Clinic is the people who practice the art of healing in the Mayo Tradition. As alumni of the Mayo family, let’s take this exciting opportunity of a tangible look into the future through the Gonda Building and recommit ourselves to the more important truly human side of medicine. Best wishes and good health to you and your families.

Sincerely,
David Herman, M.D.
Secretary-Treasurer
Mayo Medical Alumni Association

Mayo Clinic publishes health book on depression

Mayo Clinic on Depression examines an illness that affects nearly one in ten Americans each year. The soft-cover book is the latest in the on-health series developed by Mayo Medical Ventures in support of Mayo Clinic’s commitment to be a health information resource for the public.

Because many people don’t know what depression is or how to deal with it, untreated depression is the number one cause of suicide in the United States. Mayo Clinic on Depression helps people recognize depression and better understand why it occurs, how it can affect their lives and what can be done to overcome this complex and potentially serious illness. The book also offers tips to families and friends of depressed individuals for how to deal with their loved one’s illness.

Keith Kramlinger, M.D., of the Department of Psychiatry and Psychology at Mayo Clinic Rochester, is medical editor of the book. Mayo Clinic on Depression is available in most bookstores for $14.95, or by calling 1-800-291-1128 and requesting order code 0124COM4. Book revenues are used to support Mayo Clinic programs, including medical education and research.
Alumni Tour to Italy announced for 2002

Join the Mayo Medical Alumni Association 2002 International Tour and experience la dolce vita as you visit Italy during the ideal time of Sept. 23 to Oct. 8. High quality and value combined with unique cultural experiences are the hallmarks of Mayo alumni international tours, and the 2002 tour is no exception. Highlights of this exceptional tour include five nights in Rome – where medical education programs will take place – four nights in Florence, three nights in Parma and two nights in Venice. All hotels are four- and five-star properties with excellent locations.

While in Rome, you’ll visit many ancient and modern sites, including the Forum and Coliseum, Piazza Navona, Fountain of Trevi, and Via Veneto. You’ll enjoy the extraordinary experience of a Papal Audience, as well as a private guided tour of the Vatican Museum and Sistine Chapel and a gala dinner at the exclusive Palazzo Colonna. In Rome, you’ll have the opportunity to meet and form new relationships with physicians in Italy who have ties to Mayo.

Your experiences in Florence will include a guided tour of the city, the Academy of Fine Arts, the Uffizi Gallery and the Cordon Bleu School of Cooking. You’ll also visit the beautiful Chianti Classico area around Florence, with trips to medieval Siena and the charming hilltop village of San Gimignano.

The less often visited but charming city of Parma is your next destination. Famous for being the birthplace of the artist Correggio and the conductor and musician Toscanini, Parma and its beautiful surrounding region has much to offer, including its famous Teatro Regio and the local specialties of Parma ham and Parmesan cheese.

Finally, you will travel to romantic Venice where you’ll stay just steps from San Marco Square. Your guided tour of the city will include admission to the Doges Palace, a gondola ride and a final night’s farewell dinner for all tour members. You’ll also have time to visit some of the finest squares and shops in the world.

The cost of the tour is $4,999 ($333/day) double occupancy, excluding international airfare. Airfare from the U.S. has been contracted and will be offered at special group discounted rates for coach and business classes. (Group airfares cannot be upgraded.) For more information, please call Concierge Travel Services toll-free at 1-877-280-9066. Informational and registration brochures are available upon request. Reservations are confirmed by receipt of a per-person deposit and will be made on a first-come basis starting Oct. 16, 2001. Reservations may be sent via fax or e-mail.

Alumni meetings

Receptions
American Society of Nephrology, Oct. 14-17, San Francisco, Calif.
American Academy of Child and Adolescent Psychiatry, Oct. 25, Honolulu, Hawaii
Association of American Medical Colleges, Nov. 2-7, Washington, D.C.
American Society of Plastic and Reconstructive Surgery, Nov. 3-7, Orlando, Fla.
American Society of Therapeutic Radiology and Oncology, Nov. 4, San Francisco, Calif.
American Heart Association, Nov. 12, Anaheim, Calif.
American College of Rheumatology, Nov. 11-15, San Francisco, Calif.
American Association for the Study of Liver Disease, Nov. 12, Dallas, Texas
Society for Neuroscience, Nov. 13, San Diego, Calif.
Radiology Society of North America, Nov. 26, Chicago, Ill.
American Society of Hematology, Dec. 7-11, Orlando, Fla.
Mayo alumni regional meetings

Greater Washington D.C., Oct. 26
Northern California, Dec. 1

Postgraduate meetings

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

Clinical Autonomic Workshop, Oct. 7, 2001
Addiction Medicine, Oct. 20-21, 2001
Update in Cardiovascular Diseases, Oct. 27-28, 2001
Mayo Clinic Rochester Clinical Reviews, Oct. 29-31 and Nov. 12-14, 2001
Current Concepts in Primary Eye Care, Nov. 1, 2001
Mayo Symposium on Sports Medicine, Nov. 1-2, 2001
OB/GYN Clinical Reviews, Nov. 8-10, 2001
Geriatric Update for the Primary Care Physician, Nov. 15, 2001
Parkinson’s Disease, Dementia and Other Neurodegenerative Disorders for the Practitioner, Nov. 16-17, 2001, Scottsdale, Ariz.
Managing Care in Rural Settings, Nov. 29-30, 2001
Frequently Encountered Clinical Ethical Dilemmas, Feb. 20-22, 2002
Mayo Clinic Tutorials in Diagnostic Radiology, Feb. 24-28, 2002, Big Island, Hawaii
Mayo Clinic Interactive Surgery Symposium, Feb. 24-March 1, 2002, Maui, Hawaii
A Multidisciplinary Update in Pulmonary and Critical Care Medicine, April 4-7, 2002, Phoenix, Ariz.

Alumni news

1940s
James Lalley (General Surgery ’48) directs an experimental cancer laboratory at the University of Missouri-Kansas City Medical School.

1950s
Stanley Maxeiner Jr. (General Surgery ’52) has published a book titled Transplant, a story about seven people whose individual decisions weave their fates together.

1960s
Drake Duane (Neurology ’68) was named the Norman Geschwind Lecturer for the Annual International Dyslexia Association Meeting.
Theodore Hersh (Gastroenterology ’63) recently received two U.S. patents.
Paxton Howard Jr. (Internal Medicine ’67) received the Health Care Foundation of New Jersey Humanism in Medicine Award for 2001. The award goes to a Texas A & M College
of Medicine faculty member each year. He is chair of the Texas Health Care Trustees and is a board member of the Texas Hospital Association. He will retire from clinical practice on Dec. 31, 2001.

**Hal Houston** (General Surgery ’67) received the Kentucky Athletic Trainers Society Award of Merit for his work teaching and serving as team physician for Murray State University for many years. He also received Murray State’s Golden Horse Shoe Award for service to the university and was inducted into the school’s athletic hall of fame.

**James Monge** (General Surgery ’62) retired from the Duluth Clinic (Minn.). He recently spent nine weeks in Cameroon doing surgery and teaching. His wife Mary Ann and daughter Katherine accompanied him and created the hospital’s first hospital chart in French.

**Edwin Whitman** (General Surgery ’61) is the California cancer liaison chair for the American College of Surgeons (ACS) and is president-elect of the Northern California ACS.

**Karen Fountain** (Radiation Oncology ’76) was listed in New York Magazine’s “Best Doctors” issue. She was selected by other New York physicians. After more than 20 years at Columbia University College of Physicians and Surgeons, Dr. Fountain joined Long Island Radiation Oncology, a private practice group located in Manhasset on Long Island’s North Shore.

**Barry Keeton** (Pediatric Cardiology ’78) was elected president of the British Pediatric Cardiac Association and assumes his post in November 2001. He is consultant pediatric cardiologist at Southampton University Hospital, Southampton, UK.

**Virinder Moudgil** (Molecular Medicine ’76) was appointed to a three-year term as interim vice president of academic affairs and provost at Oakland University in Rochester, Mich.

**Daniel Nijensohn** (Neurosurgery ’77) was included in New York Magazine’s “Best Doctors” issue. He also was recently promoted to associate clinical professor in neurosurgery at Yale University School of Medicine.

**Gyman Okeson** (Internal Medicine ’69, Pulmonary Diseases ’70) retired after 31 years with Scott & White in Temple, Texas. During his career he served as director of the Section of Pulmonary Rehabilitation and also medical director of the Pulmonary Laboratory.

**Timothy Saunders** (Prosthodontics ’77) was honored by the associate student body, University of Southern California School of Dentistry with a “Teaching Excellence” award.

1970s

**Steven Black** (Surgery ’77, Plastic Surgery ’79) is serving as chief of staff of Nebraska Health System, a merger of Clarkson Hospital and University of Nebraska Hospital.

**Richard Carlson** (Diagnostic Radiology ’76) is president of the Minnesota Radiological Society (Minnesota chapter of the American College of Radiology) and received an honorary degree of Fellow of the American College of Radiology.

**Darrell Fisher** (Orthopedics ’70) retired after 30 years in orthopedics and is doing volunteer work overseas.

1980s

**Fernando Austin** (Internal Medicine ’80) is serving his second term as chief-of-staff at Orange Coast Memorial Hospital in Fountain Valley, Calif. He was promoted to colonel in the U.S. Army Reserves (Medical Corps) and was selected in 2000 as Physician of the Year-Orange Coast Memorial Medical Center.

**Philippe Baele** (Anesthesiology ’82) was appointed president of the Belgian Society of Anesthesia and Resuscitation. He is serving his second five-year term as chief of the Department of Anesthesiology at St. Luc University Hospital near Brussels, Belgium.

**Nadey Hakim** (General Surgery ’89) edited a book titled Transplantation Surgery.

**Bruce Hyma** (Anatomic and Clinical Pathology ’87) was appointed chief medical examiner and department director of the Miami-Dade County Medical Examiner Department in Miami, Fla.

**Stephen Lanspa** (Internal Medicine ’81, Gastroenterology ’84) was appointed associate dean for clinical affairs at Creighton University School of Medicine.

**William Law Jr.** (Endocrinology ’83) was elected secretary of the American Association of Clinical Endocrinologists Board of Directors.

**Keith Mansel** (Internal Medicine ’82, Pulmonary Diseases ’85) is clinical associate professor at the University of Mississippi School of Medicine and past-president of the Mississippi Thoracic Society.

**Sheldon Marks** (General Surgery ’84) recently completed a 45-city speaking tour in the United States where he spoke with urologists, radiation oncologists and medical oncologists about hormone therapy and prostate cancer treatment. His book Prostate and Cancer was recently printed in Chinese and is available in several other languages.

**Anne Peterson** (Mayo Medical School ’82) has been nominated by President George W. Bush to serve as assistant administrator for global health at the U.S. Agency for
Dr. Peterson is the Virginia Health Commissioner.

Mark Laney (Pediatric Neurology ’89) was named president of the Cook Children’s Physician Network in Texas, part of the Cook Children’s Health System.

Marvin Seppala (Mayo Medical School ’84) has written Clinician’s Guide to the Twelve Step Principles. The book was published in April 2001.

Steven Waldman (Anesthesiology ’80) wrote and published the second edition of Interventional Pain Management.

Charles Adler co-directed the 19th Annual Benign Essential Blepharospasm Research Foundation’s meeting.

Samuel Asirvatham, Malcolm Bell, Raul Espinosa, Titus Evans Jr., and Rick Nishimura were presented with “Outstanding Teacher of the Year” awards at the Division of Cardiovascular Diseases annual banquet.

Patricia Barrier was appointed associate dean for student affairs, Mayo Medical School.

Daniel Berry accepted the role of associate editor for the lower extremity of Journal of the American Academy of Orthopaedic Surgeons.

David Douglas was honored as the “Mentor of the Year.”

Hossein Gharib was elected president-elect of the American Association of Clinical Endocrinologists. He also was the recipient of the 2001 Iranian American Medical Association Achievement Award in the Art and Science of Medicine.

Raymond Gibbons was appointed associate editor for the cardiology section of Scientific American Medicine.

Clive Grant was elected president of the American Association of Endocrine Surgeons. He also is president of the Priestley Society.

Daniel Hanks presented Emergency Medicine Grand Rounds at the State University of New York at Buffalo and the Center for Transportation Injury Research.

Gerald Holcomb was inducted into the Pro Rege Society at Hastings College, the highest non-academic honor the college bestows.

Joseph Hung was elected president-elect of the Chinese American Society of Nuclear Medicine.

Harold Kitaoka received the Roger Mann Award for a clinical research presentation at the American Orthopedic Foot & Ankle Society.

Nicholas LaRusso received the Distinguished Achievement Award of the American Gastroenterological Association. He also was conferred with an honorary fellowship in the Royal College of Physicians of Ireland.

Andrew Limper was elected to membership in the American Society of Clinical Investigation.

Cynthia McCollough was invited to serve as an expert member of the International Electro-Technical Commission and United States National Committee Technical Advisory Group.

Virginia Miller gave the keynote address at the first Missouri Symposium on Women’s Health Research at the University of Missouri-Columbia.

Manfred Muenter received the Fred Springer Award from the American Parkinson Disease Association for his research on Parkinson’s Disease. The award was given at the American Academy of Neurology meeting in Philadelphia.

H. Bryan Neel III was elected historian of the American Laryngological, Rhinological and Otological Society. He also delivered the commencement address at the University of Minnesota-Crookston.

Douglas Pritchard was the Zimmer Visiting Professor for the University of Florida Orthopedic Oncology Course.
Mayo Update

Jorge Rakela was appointed visiting professor, Department of Medicine, at the University of Arizona Health Sciences Center. He also became a member of the Arizona Liver Research Institute.

Izabela Riffe received the Florida Academy of Family Physicians 2001 Young Leader Award.

B. Lawrence Riggs was Kroc Foundation Visiting Professor for the Department of Medicine, Washington University Medical Center and Barnes-Jewish Hospitals.

Annie Sadosty was awarded first place in the faculty discussant category during the Clinical Pathologic Conference Competition at the Society of Academic Emergency Medicine meeting.

Henry Schultz was invited to serve as an American Medical Association representative on the Residency Review Committee for Internal Medicine.

Joseph Segura received the Distinguished Service Award from the American Urological Association at its annual meeting.

Anthony Stans was elected secretary of the Minnesota Orthopedic Society.

Eric Tangalos was elected to the board of the American Geriatrics Society. He also serves on the Public Education Committee and remains on the editorial board for Annals of Long-Term Care.

Thomas Viggiano was appointed associate dean for faculty affairs, Mayo Medical School.

Russell Wiesner was elected president of the Minnesota Surgical Society. He was also appointed chair for the State of Minnesota Committee on Trauma by the American College of Surgeons.

Scott Zielow was elected president of the Minnesota Surgical Society. He was also appointed chair for the State of Minnesota Committee on Trauma by the American College of Surgeons.

Fellow, resident and student news

Rachel Allen (Mayo Medical School) won the Challenge a Friend contest by successfully challenging 19 of her friends to participate in the CardioVision 2020 lifestyle. Rachel donated the $500 prize to the American Medical Association-Medical Student Section.

Gavin Harewood, (Gastroenterology) received the 2001 Eugenie M. Bolz Teaching and Research Scholarship Award in Gastroenterology. Since beginning his training at Mayo, he has received numerous awards including the Mayo Foundation Residents’ Research award, the Lawlor Research Award by the American College of Gastroenterology and the American Digestive Health Foundation Endoscopic Research and Outcomes Effectiveness Award.

Christopher Wittich (Mayo Medical School) was awarded the American Heart Association’s, James H. Moller, M.D., Scholarship to be used for his research trimester.

Narasimhan Nagan (Clinical Chemistry) was awarded first prize in the annual meeting of the American Association for Clinical Chemistry in Chicago for his poster titled “Single Nucleotide Polymorphism Analysis of the Human Serum Paraoxonase (PON I) Gene on Electronically Active Customized Microarrays.”

Sandra Williams (Internal Medicine) won the oral presentation category at the Associates Meeting of the Florida Chapter of the American College of Physicians – American Society of Internal Medicine for her work “Inclusion Body Myositis and Celiac Sprue in a Patient with ITP.”

Obituaries

1930s

Vernon Evans, 96, died March 23, 2001. Dr. Evans graduated from Loyola Medical School in 1929 before going on to serve a fellowship in internal medicine at Mayo Clinic in 1938. He served three terms as president of the medical staff of the former St. Joseph Mercy Hospital (currently Provena Mercy Center Hospital) in Aurora, Ill. Dr. Evans was also a former president of the Kane County Medical Society. He served the Aurora community in private practice until his retirement in 1979.
1940s

Edwin Andersen, 93, died July 6, 2001. Dr. Andersen graduated in 1931 with a master’s degree in bacteriology from the University of Washington, and from Stanford Medical School in 1936. After his internship and pathology residency at the former Philadelphia General Hospital, he completed a residency in internal medicine at Mayo Clinic in 1946. He then began his private medical practice in Pottstown, Pa., retiring in December 1995.

William Black, 84, died March 28, 2001. Dr. Black graduated from medical school at Temple University, before entering the U.S. Army in 1944. He served as captain in the U.S. Medical Corps and was the chief of surgical services. He completed his fellowship in general surgery at Mayo Clinic in 1947 and moved to New Ulm, Minn. He was a general surgeon at the Seifert Clinic and was founder of the New Ulm Medical Center. During his career, he was appointed governor of the American College of Surgeons. He retired in 1988.

Robert Rushmer, 86, died July 13, 2001. Dr. Rushmer received his medical degree from Rush Medical College (now Rush University) in 1939 and later went on to complete a fellowship in pediatric and adolescent medicine at Mayo Clinic in 1942 that included work in aviation medicine. He joined the Seattle campus of the University of Washington in 1947 and founded the Center of Bioengineering in 1967, serving as its director, before retiring in 1985 as professor emeritus of bioengineering. During his time at the University of Washington, he and his team of physics and engineering students developed heart monitoring, applying Doppler ultrasound imagining to the pumping heart and blood flow.

Carl Schlicke, 91, died May 12, 2001. Dr. Schlicke received his medical degree from Johns Hopkins School of Medicine in 1935 and completed a fellowship in surgery at Mayo Clinic in 1942, where he was first assistant to Dr. Charles W. Mayo. During World War II, he served in the Pacific Theater, rising to the rank of lieutenant colonel. He moved to Spokane, Wash., to practice at Rockwood Clinic. He became a staff member at Sacred Heart Hospital where he served as president of staff from 1956 to 1957, chair of the surgical committee from 1958 to 1975 and member of the board of directors from 1973 to 1981, including chair in 1980. Dr. Schlicke served as president of the Washington State Chapter of the American College of Surgeons, president of the Washington State Medical Association, president of the Mayo Clinic Alumni Association, president of the Western Surgical Association, second vice president of the American Surgical Association and first vice president of the American Surgical Association. Before his retirement in 1979, he served as chair of the Board of Commissioners of the Joint Commission on Accreditation of Hospitals.


1950s

W. Burgess Sealy, 91, died May 23, 2001. Dr. Sealy graduated from the University of Texas Medical Branch at Galveston in 1934 before completing a residency in surgery at Mayo Clinic in 1942. He served in the U.S. Medical Corp in World War II in New Guinea from 1942 to 1945. He returned to Texas after the war and began his surgical practice in Fort Worth where he served until retirement in 1985. Dr. Sealy was a charter member and past-president of the Priestley Surgical Society and was president of the Tarrant County Chapter of the American Cancer Society. He also served as chair of the board of the Harris College of Nursing and was a member of the Texas Christian University Board of Trustees.

Gene Sengpiel, 85, died March 8, 2001. Dr. Sengpiel received his medical degree from Marquette University and completed a fellowship in radiology at Mayo Clinic in 1944. Upon completion of his fellowship, Dr. Sengpiel served in the U.S. Army for three years. After leaving the Army, he practiced in Detroit for three years, before coming to Milwaukee. He served as director of the Department of Radiology at St. Joseph’s Hospital, where he worked for 28 years. He was associate clinical professor emeritus of radiology at the Medical College of Wisconsin and the University of Wisconsin Medical School.

1960s

1960s

Soo Ik Lee, 63, died Nov. 20, 1995. Dr. Lee graduated from medical school at Yonsei University in Seoul, Korea, in 1958. He later completed his residency in electroencephalography at Mayo in 1969. Dr. Lee practiced at Yonsei University College of Medicine, serving as professor of neurology and chair of the Neurology Department in 1974. Later in 1974, he began as attending neurologist and director of the EEG and Evoked Potential Laboratory at the University of Virginia School of Medicine, serving until his death.

Fred Ten Eyk, 71, died April 11, 2000. Dr. Ten Eyk graduated from Stanford Medical School in 1954. After completing an internship at King’s County Hospital in Brooklyn, he served in the U.S. Air Force. Dr. Ten Eyck completed his fellowship in internal medicine at Mayo Clinic in 1961 and continued service in the U.S. Air Force until 1965, when he began a practice at Hoag Hospital in Newport Beach, Calif, where he worked for 26 years. He retired in 1990.

1970s

Joseph Logic, 66, died April 28, 2001. Dr. Logic was awarded his medical degree in 1960 from Marquette University and went on to receive a Ph.D., in physiology from Marquette in 1964. He served a fellowship in internal medicine at Mayo Clinic in 1965. Dr. Logic served as assistant professor at the University of Kentucky College of Medicine from 1966 to 1969 and the University of Tennessee College of Medicine from 1969 to 1974. In 1975, Dr. Logic joined the University of Alabama School of Medicine, Birmingham, Ala., where he became a professor in the Division of Nuclear Medicine, Department of Radiology. He retired in 1999 and served as professor of physiology at Spartan Medical School on the Island of St. Lucia in the Caribbean. Dr. Logic served as past-president of the Alabama Society of Nuclear Medicine, the Alabama Heart Association and Birmingham Cardiovascular Society.

Bruce Zimmerman, 59, died July 16, 2001. Dr. Zimmerman received his medical degree from the University of Minnesota in 1967. Following an internship at Parkland Memorial Hospital in Dallas, he entered the U.S. Army, where he served from 1969 to 1972. He went on to Mayo Clinic where he completed a residency in internal medicine in 1974 and a fellowship in endocrinology in 1976. He was a professor of medicine, Mayo Medical School, and served as vice-chair of the Division of Endocrinology at Mayo Clinic Rochester from 1985 to 1992. He served on many committees and task forces for the American Diabetes Association and won the organization’s Outstanding Clinician in the Field of Diabetes Award and the Banting Medal. He also received the Roche Diabetes Leadership Award and the George M. and Edna M. Endicott Professorship in Medicine.
The Mayo Medical Alumni Association is pleased to offer these fine products for your memorabilia and special gift needs. Orders may be mailed or faxed to the Mayo Alumni Center. Complete ordering and shipping information is provided on the order form. A flat postage rate of $6.50 is charged for all orders, except those for lamps and chairs which have shipping and handling charges based on destination.

Mayo Medical Alumni Memorabilia and Gifts

A. Ties
These fine custom-designed ties are made of 100 percent silk and feature the Mayo triple-shield logo.

#1001J — Burgundy & navy with gold pinstripe tie
#1002B — Red & navy with gold pinstripe tie
#1003F — Red & hunter green print tie
#1004C — Red & navy print tie
#1005X — Burgundy & navy bow tie, round or square styles available, please specify
#1006R — Navy & burgundy with gold print (NEW)

Ties, $35. each

B. Scarves
The stylish design highlights the Mayo logo in each corner of the square style scarf and on the ends of the oblong style scarf. Made of 100 percent silk.

#2001 — Oblong style, gold and navy design on burgundy background with gold strips and navy border, $30. each
#2002 — Square style, paisley burgundy background with gold rope detailing and navy border, $35. each
#2003 — Square style, paisley navy background with gold rope detailing and burgundy border, $35. each

D. Charm
This beautiful 10K gold charm replica of the Mayo logo is suitable for a bracelet or necklace. Diameter is approximately 7/8”.

#3002 — Gold charm, $95. each

Please see order form for postage and handling charges.
E. Pens
Each gold and black pen offered is a fine writing instrument and features the Mayo logo.
#4001 — Al Craft’s Crete pen, $20. each
#4002 — Parker Black Lacquer Insignia pen, $35. each
#4003 — Parker Duofold Black Platinum Series pen, $145. each

F. Key Rings
These Mayo key rings are handsomely crafted, highly useful and make the perfect gift.
#5001 — Antique bronze circular key ring, 1”, $8. each
#5002 — Antique brass medallion on genuine leather teardrop fob, 1”, available in either brown or burgundy leather, $12. each

G. Bookmark
Our polished brass bookmark is electroplated with a gold finish and engraved with the Mayo logo. Please indicate round, hexagon or two of each.
#6004 — Set of four (4) bookmarks, $20.

H. Alumni Lamp
The Alumni lamp is made of solid hardrock maple and measures 27” high. The Mayo Medical Alumni Association logo is engraved on the base, which features a hand-rubbed cherry finish. Personalization is available for an additional charge.
#7001 — Alumni lamp, $179. each, plus shipping and handling
Personalization charges:
1st line - $25., 2nd line - $10., 3rd line - $10.

Please see order form for shipping and handling information and charges.
I. Alumni Chairs
The Alumni captain’s chair, Boston rocker and swivel desk chair (see H.) are beautifully handcrafted in the United States from solid hardrock maple. The Mayo Medical Alumni Association logo is prominently engraved on the crown. Personalization, engraved under the Alumni Association logo, is offered as an option for an additional charge.

- #8001 — Captain’s chair, (18”D x 23”W x 34”H), $295. each, plus shipping and handling
- #8002 — Boston Rocker, (27”D x 23”W x 40”H), $295. each, plus shipping and handling
- #8003 — Swivel chair, (18”D x 23”W x 34”H), $425. each, plus shipping and handling

Personalization charges: 1st line - $25., 2nd line - $10., 3rd line - $10.

Please see order form for shipping and handling information and charges.

J. Mayo Graduate School of Medicine Ring
The men’s (shield-shaped) and women’s (oval-shaped) MGSM rings are handcrafted in 14K gold with a light antique finish. Designed by Mayo residents and fellows, this ring uniquely identifies the wearer as an alumnus of the Mayo Graduate School of Medicine. Please confirm your ring size with a jeweler prior to ordering. Available in whole and half sizes. Please identify graduation year when ordering. Allow 8-10 weeks for delivery.

- #9001 — Men’s MGSM ring, $570. each
- #9002 — Women’s MGSM ring, $420. each

K. Mayo Medical School Ring
For information on ordering the Mayo Medical School ring, please contact Mayo Medical School by calling (507) 284-3627, or faxing (507) 284-2634. Please confirm your ring size with a jeweler prior to ordering. Available only to graduates of Mayo Medical School.
L. Closeout Items — Quantities are limited and availability subject to change

Tote Bag
This versatile 14” x 17” tote bag is made of durable canvas. Choice of navy or burgundy emblem and trim colors on natural off-white canvas. Washable.
#1101 — Tote Bag, $8. each

Picture Frames
Elegant picture frames with etched Alumni Association emblem are suitable for home or office. This 5” x 7” frame holds a 3” x 5” photo.
#1102G — 5” x 7” Frame, $12. each
(Please specify gold or silver, horizontal or vertical)

Medallion Paperweight
Bronze-tone medallion commemorates the 25th Anniversary of the Mayo Medical School on one side and the Mayo brothers on the other.
#1104 — Medallion paperweight, $21. each

Ties
Each Mayo alumni custom-designed tie is made of 100 percent silk and features the Mayo triple-shield logo.
#1006P — Chestnut with champagne pinstripe — satin finish
#1007D — Navy with red pinstripe
#1008O — Dark brown with gold pinstripe — satin finish
#10097 — Hunter green with red pinstripe — satin finish
Ties, $21. each

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**Closeout Items**

**Item Number** | **Item Description** | **Qty.** | **Size/Color** | **Each** | **Price Total**
--- | --- | --- | --- | --- | ---

**Personalization for chairs and lamp: 1st line – $25, 2nd and 3rd lines – $10**

**Subtotal**

**Sales tax:** Rochester residents add 7%, Minnesota residents add 6.5% for all items except ties.

**Postage:** Add $6.50 to all U.S. orders, excluding those for lamp and chairs. Please call for foreign delivery postage.

**Furniture shipping and handling:** Add specified amount for each lamp or chair ordered.
- AZ, CA, CO, ID, MT, NV, NM, OR, TX, UT, WA, WY ......................... $35.00
- All other states in the continental U.S. ........................................... $25.00
- Massachusetts residents add 5% sales tax on orders for lamps and chairs.
- Call for delivery in Alaska, Hawaii and foreign countries. Charges dependent on destination.

**Total amount**
(Enclose payment in U.S. dollars drawn on U.S. bank)

**Chair and lamp personalization (optional) One, two or three lines, 30 spaces maximum per line**

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(Signature required for credit card use)

**Shipping information:**
Please allow six to eight weeks for delivery.

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

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