Welcome to the Michigan State University College of Osteopathic Medicine!
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We're delighted that you're attending our open house. Our students, faculty and others have worked hard to show you the best of our college and the osteopathic profession. We hope you'll enjoy your time with us.

Because osteopathic medicine requires an understanding of human physical, biological, psychological, cultural and environmental elements, you will see a broad range of exhibits — a tour of the gross anatomy laboratory, an opportunity to untangle a sensitive ethical issue in medical humanities, a view of the world through the eye of the electron microscope. You'll see medical education at work, as students share their experiences, their texts and curriculum, and demonstrate their clinical skills. You'll have an opportunity to see a demonstration of osteopathic manipulative medicine, and to understand its usefulness in the context of total medical care.

Our exhibits include:
- Gross Anatomy Laboratory
- Electron Microscopy
- Biomechanics
- Family Medicine
- Internal Medicine
- Osteopathic Medicine
- Pediatrics
- Pharmacology and Toxicology
- Radiology
- Medical Humanities Program
- Medical Scientist Training Program
- Office of Admissions
- Medical Access and Support Program
- MSU-COM Clinical Programs
- Continuing Medical Education
- Carcinogenesis Laboratory
- MSU-COM in the News
- Carson City Hospital
- Metropolitan Hospital, Grand Rapids
- Lansing General Hospital
- Flint Osteopathic Hospital
- Cost of Medical Education
- Student Osteopathic Medical Association
- Student Associate Auxiliary
- Sigma Sigma Phi
- Pathology
- Office of Development
- Undergraduate American Academy of Osteopathy
- Black Osteopathic Students Association
- Class of '87
- Class of '88
- Psychiatry
- Microbiology and Public Health
What is Osteopathic Medicine Anyway?

More than 25,300 osteopathic physicians are practicing in the United States today. They use all scientifically accepted medical methods to maintain human health and to prevent, diagnose and treat human disease and injury.

Traditional M.D.s and osteopathic physicians differ in the D.O.s' emphasis on body structure, preventive medicine, the "whole-person" approach to the patient, and the importance of family practice. (More than 75% of the D.O.s — as opposed to 25% of the M.D.s — are in primary care.) Most visible of the differences between the professions, however, is the D.O.s' use of manipulative medicine.

So How Are D.O.s Educated?

D.O.s almost always have graduated from a college or university before beginning four years of education in an accredited osteopathic medical school. Upon graduation, they must pass licensing examinations, which in many states are identical to those taken by M.D.s. They then take year-long rotating internships in osteopathic hospitals. If they choose, they may further their training in two- to six-year residency programs, in specialties ranging from anesthesiology to nuclear medicine.

Osteopathic medical students receive a broad education in the basic sciences, including anatomy, histology, biochemistry, physiology, microbiology and pharmacology. Their clinical training includes family medicine, surgery, pediatrics, obstetrics and gynecology, psychiatry, radiology, pathology and emergency care. Throughout they are also taught appropriate osteopathic manipulative techniques.
The MSU College of Osteopathic Medicine was the first state-assisted and university-based school of its kind, and the first new osteopathic medical school in fifty years. It was established by public act of the Michigan legislature in 1969, and enrolled its first class in 1971.

Since then, 1,025 men and women have received D.O. degrees from MSU.

Osteopathic manipulative medicine includes special techniques by which physicians use primarily their hands to correct problems in the body. Though they may resemble physical therapy, exercise therapy, or chiropractic, these procedures are a distinctive form of manual medicine. They are not regarded as a cure-all, but rather a very useful tool which can be employed among others to help the patient.

Manipulation includes palpatory diagnosis, in which the doctor can evaluate almost any body part for structural disorder or disease, and manipulative therapy, in which the hands are used in a number of ways to mechanically move body fluids, soft tissue, or bone to alleviate distressing symptoms of pain or injury.

With some 3,355 licensed to practice, Michigan far and away has more osteopathic physicians than any other state. We also rank first in number of osteopathic hospitals — 35.

The MSU College of Osteopathic Medicine was originally founded through the efforts of the state's osteopathic physicians and the Michigan Association of Osteopathic Physicians and Surgeons. The college was begun as the private Michigan Osteopathic College in Pontiac before enabling legislation made it a public institution.
Family Practitioners
and Proud of It!

Of MSU-COM's 1,025 alumni, three-fourths are practicing in primary care, serving the general medical needs of families and individuals. Two-thirds of our alumni have remained in Michigan.

Serving the Medically
Underserved

Of the MSU-COM alumni providing health care in Michigan, more than half are working in counties designated as physician shortage areas. These doctors are demonstrating both the profession's and college's commitment to persons in rural and poor urban areas who may not have ready access to health care.

Student Data for the
Statistics Freaks!

About 525 students are enrolled in MSU-COM at any given time.

89% of MSU-COM students are from Michigan.

29% did their premedical training at Michigan State.

Virtually all hold bachelor's degrees; 16% have masters, 3% hold doctorates when admitted.

Our Affirmative
Action IS Affirmative

Among all osteopathic medical schools, the MSU college has the highest ratio of female students (35%), of minority students (15%), and of economically disadvantaged nonminority (8%) students.
Education’s Lifelong for the D.O.

The MSU College of Osteopathic Medicine has gained international recognition for its continuing medical education program for practicing physicians, particularly in the areas of manipulative medicine and structural diagnosis. Many M.D.s as well as D.O.s enroll in our CME courses.

CME: Quantity as Well as Quality

During 1984, MSU-COM offered 106 continuing medical education programs for a total of 528 hours of CME credit for 1,471 registrant physicians.

Osteopathic Hospitals Key to Education at MSU

During their last two years of medical school, students at MSU-COM take rotations in 18 osteopathic hospitals located around the state. These hospitals affiliated with MSU-COM are located in Warren, Farmington Hills, Detroit, Lansing, Flint, Grand Rapids, Jackson, Lapeer, Mount Clemens, Madison Heights, Pontiac, Trenton, Saginaw and Traverse City.

Volunteer D.O.s Invaluable

In addition to hospital training, our students are taught by some 580 osteopathic physicians who volunteer their time and open their practices to teach. Their contributions have been valued at $2,667,500 a year.
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Savings Through Shared Departments

MSU-COM jointly administers its basic science, behavioral science, and some clinical departments with other MSU colleges. Shared units include the Departments of Anatomy, Biochemistry, Community Health Science, Microbiology and Public Health, Pathology, Pharmacology and Toxicology, Physiology, Psychiatry, and Radiology, and the Medical Humanities Program. The MSU osteopathic college solely administers the Departments of Biomechanics, Family Medicine, Internal Medicine, Osteopathic Medicine and Pediatrics.

Research: The Full Scope of Medicine

Research projects within the MSU College of Osteopathic Medicine cover the full scope of medicine. They include studies in biochemistry, physiology, pharmacology, anatomy, carcinogenesis, biomechanics, molecular biology, psychiatry, radiology, microbiology, health care delivery and economics, and clinical medicine. Many projects include technology transfer to public and private sectors.

We Produce Scholars As Well As Doctors

The MSU College of Osteopathic Medicine is the only osteopathic college to administer the M.S. and Ph.D. degrees as well as the D.O. It is also the only college anywhere to offer joint D.O./Ph.D. degrees in a Medical Scientist Training Program to educate medical faculty and researchers.

MSU-COM: Strong Commitment to Research

MSU-COM is pre-eminent among D.O. colleges in research funding, projects, quality and scope. The College receives more than $5 million each year from outside sources to support its research projects, funding which is given only after meticulous review by other scientists. This research includes all the major scientific disciplines of medicine.
Biomechanics???  
The Department of Biomechanics at MSU-COM was established to study the relationships between structure and function in the human body. These relationships are particularly important as bases of osteopathic medicine. They are doing unique research on the mechanical properties of soft tissue, and three-dimensional studies of the human body in motion.

Computer Applications in Biomechanics  
With a major gift from Brooks, Inc., The Department of Biomechanics joined forces with MSU-COM's Elite Athlete Program and the College of Engineering's Case Center for Computer-aided Design. Their joint work involves development of computer applications, instrumentation, imaging and analysis for biological elements. Applications include care for back injuries, which raise Michigan's health care costs more than $120 million each year. Other projects include development of foot protheses, design of automobile and aircraft seating, analysis of work environments, and development of equipment and training techniques for athletes.

A World-Class Team Studies Cancer Causes  
The Carcinogenesis Laboratory in the MSU College of Osteopathic Medicine is the largest research facility in the world using human cells to study the development of cancer. These scientists are studying how known carcinogens — such as radiation, sunlight, and certain chemicals — change normal cells into tumor cells. Their work will allow development of drugs or other procedures that can block the carcinogenic process.
Medical Service in 36 Programs

MSU-COM maintains 36 clinical programs, many in concert with hospitals and community public health programs. In 1983-84, on-campus patient visits totalled 32,626, and off-campus, 35,388. Among these College faculty served 23,389 medically indigent patients in county health clinics.

Cooperation with Lansing Hospitals

Among MSU-COM's 18 affiliated hospitals are the four in Lansing, where students take clinical rotations. In addition the College has contracts for care in physical medicine and rehabilitation, and anesthesiology at St. Lawrence; infectious diseases, oncology, family medicine, and neonatology at Edward W. Sparrow; pulmonary medicine, physical medicine and rehabilitation at Lansing General, and pediatric intensive care at Ingham Medical.

Clinical Center Programs

At the MSU Clinical Center, MSU-COM physicians provide primary care (family medicine, pediatrics, biomechanics, adolescent medicine); specialty care (internal medicine, obstetrics/gynecology, immunology/rheumatology, nephrology, neurology, surgery, and a Muscular Dystrophy Association clinic); a diagnostic assessment clinic for the Michigan Department of Public Health, and athletic medicine, physical medicine and rehabilitation, and a biofeedback clinic in the Institute for Health and Human Fitness.

Elite Athlete Program

A combined program of research and service is conducted by MSU-COM physicians and others through the Center for the Study of Human Performance in Erickson Hall. The program, which began with studies of MSU's star hockey team, involves treadmill testing, expired gas analyses, force plate testing, tests of joint strength and motion, reaction time, and determinations of proportions of body fat. Data collected are used to determine appropriate parameters for particular sport positions, and to enhance training of individual athletes.
MICHIGAN STATE UNIVERSITY

Michigan State University is the largest institution of higher learning in the state and one of the nation's leading cultural, educational and research centers.

When it opened its doors in 1855, MSU established a new approach to education, research and public service, setting the pattern for the nation's 72 land-grant institutions that were to follow.

A total of 40,272 students from every county in Michigan, every state and 109 foreign nations pursue academic programs in 14 colleges. In terms of academic excellence, as well as size, the proportions are impressive.

The quality of its programs is evidenced by its membership in the nation's leading organization of academically superior institutions — the 53-member Association of American Universities.

Another mark of excellence has been the selection of 10 MSU seniors for Rhodes scholarships over the past 13 years, a mark unmatched by any other public institution. In addition, MSU students in nationwide competition have captured top prizes in such areas as computer science, chemical engineering and mathematics. MSU is also a leader in attracting merit scholars and in the number of students who win National Science Foundation fellowships.

Under the leadership of its 16th president, Dr. Cecil Mackey, MSU continues to pursue an innovative approach to education. The curricula range from the fine arts to business, medicine, engineering, agriculture and high-energy physics.

Michigan State is at the forefront in international programs and studies and offers the nation's most extensive array of opportunities for study overseas. Throughout the curricula there is an emphasis on lifelong education and meeting the needs of a highly urbanized society.

MSU's faculty is conducting some 2,800 research projects, utilizing such on-campus facilities as the National Superconducting Cyclotron Laboratory, the Pesticide Research Center, the MSU/Department of Energy Plant Research Laboratory, the Mass Spectrometry Laboratory and the National Institute for Research on Teaching. The Michigan Biotechnology Institute is located on the campus. The university also conducts research in various communities and at experiment stations throughout the state.

A safer, quicker, less expensive way of checking developing fetuses for genetic abnormalities has been developed by two Michigan State University microbiologists. The new technique developed by Prof. Harold Miller and Prof. Harold Sadoff has the potential for replacing amniocentesis, the currently used an estimated 200,000 times a year in the U.S. to check for abnormalities in fetuses considered to be at risk. ATA — alternative to amniocentesis — involves nothing more hazardous than drawing a blood sample from a pregnant woman and is effective when the fetus is only eight weeks. General use of ATA is expected in one to two years.

The MSU Clinical Center, opened on campus in 1976 as an ambulatory care facility, now has an annual total of 78,000 patient visits. The Center is staffed by physicians on the faculty of MSU's College of Osteopathic Medicine and College of Human Medicine.

Michigan State University since 1956, has been a leader in extending its educational and technical expertise to developing nations throughout the world. The latest, and one of the most significant undertakings, is a $4.9-million project to assist the University of Zimbabwe (formerly Rhodesia) in expanding and improving its agricultural programs.

MSU, as the prime contractor, and Pennsylvania State University as the subcontractor, were selected for the project by the United States Agency for International Development, and the government and the University of Zimbabwe.

Students are becoming more global minded. At least that is the indication from the number of MSU students who choose to study abroad, says Charles Glioizzo, director of overseas study.

MSU has the largest number of academic programs offered overseas by any United States institution — 52 programs offered in 14 countries. The more than 900 students enrolled this year represent an all-time high for MSU's Office of Overseas Study.

Summer of '85 marks the 14th consecutive year that medical students and faculty in MSU's College of Osteopathic Medicine and College of Human Medicine volunteered to provide health care to migrant agricultural workers. Clinics held weekly in St. Johns and Mason attracted as many as 70 patients in a single evening.

Michigan State University leads all public universities in the number of students who have won coveted Rhodes Scholarships over the past 13 years. Each year only 32 students in the United States are selected to receive the scholarships to study at Oxford in England. This year, MSU won two of those 32, and along with Yale University, also with two, was second in the nation only to Harvard University.

The powerful 1.5 tesla magnet for MSU's new Clinical Magnetic Resonance (MR) Service — a $2.5 million research and patient diagnostic project at the MSU Clinical Center — was swung into position by a specially insured rigger on March 29. When fully installed, the magnet, as part of a General Electric whole-body imaging system, will interact with sophisticated radio-frequency waves to produce images of the internal body previously unavailable. The Clinical Magnetic Resonance Service, one of about 40 nationwide, is expected to accept patients on a referral basis beginning in June.

The world's first superconducting cyclotron for hospital use will be built at MSU for Detroit's Harper Hospital. Since it is smaller and less expensive to build than conventional medical cyclotrons, its development is expected to spawn a whole new generation of commercially built medical cyclotrons. The new $1.5 million cancer-therapy machine will not replace other methods of treating cancer but, officials say, will be used to combat tumors that are predictably resistant to present forms of radiation.

Technology for the medical cyclotron, which is expected to be completed in about two years, was developed at the National Superconducting Cyclotron Laboratory operated by MSU and directed by Dr. Henry Blosser.
So You'd Like to be an Osteopathic Physician?

Have you considered a career as an osteopathic physician? If so, you might want to test your qualifications below to see if you have the "right stuff" for admission to an osteopathic college.

**IN HIGH SCHOOL**

- I've taken as much chemistry, mathematics and biology as possible.
- I've developed my leadership potential through extracurricular activities and have done volunteer work in a clinic, hospital or nursing home for exposure to health care.

**IN COLLEGE**

- I've completed at least 90 semester or 135 term credits in a college or university. (Virtually all have bachelor's degrees by enrollment.)
- I've completed eight semester or 12 term credits, including lecture and laboratory, with no grade below 2.0 of biology, zoology, chemistry, organic chemistry, and physics.
- I've completed six semester or nine term credits, with no grade below 2.0, of English and behavioral science.
- I've taken the Medical College Admission Test within the last three years.
- My science and overall grade-point averages are no less than 2.5 on a 4.0 scale at the time application is filed. (Virtually all admitted have substantially higher GPAs.)
- I've taken electives in biochemistry, anatomy, physiology, histology, humanities, and courses in the ethical, social, political and historical aspects of medicine.
- I've demonstrated my ability to meet the emotional, social and physical needs of others through human services activities, work, research, and extracurricular activities.

At MSU-COM, students are urged to pursue pre-application admissions counseling by contacting the director of admissions at (517) 353-7740. Brochures, catalogs, and other material also may be obtained through the Office of Admissions, MSU-COM, C110 E. Fee Hall, East Lansing, MI 48824-1316.

BE SURE TO STOP IN AND CHAT WITH OUR ADMISSIONS PERSONNEL DURING YOUR VISIT TO THE OPEN HOUSE. Both they and white-coated medical students will be available to give you both the official and unofficial information you need to consider for medical school.