

OSTEOPATHIC MEDICINE



Andrew Taylor Still, M.D., D.O.
(1828-1917)

Osteopathic Medicine's Roots are in Virginia

- Andrew Taylor Still
Founder of Osteopathic Medicine
 - Born in Jonesville, Virginia in 1828 to a Methodist minister and physician.
 - Dr. Still maintained that he had learned this mind-body-spirit approach to medicine by age 10.
 - The Stills moved west where A.T. Still became an M.D. in Kansas City, Missouri.



Birthplace cabin now
on display in
Kirksville, MO

Andrew Taylor Still

- Still served the Union army as a surgeon during the Civil war (1852/53), his surgical kit is on display at the National Museum of Health at Walter Reed Army Medical Center
- Still became dissatisfied with medicine of his day after the civil war and the loss of 3 of his children to meningitis (1864).
- This was before antibiotics and the only useful drugs included colchicines, opium and digitalis.
- Common treatments of that time included:
 - bloodletting
 - frequent excisions and amputations
 - mercury compound known as calomel that acted as a cathartic



THE DEVELOPMENT OF THE OSTEOPATHIC PHILOSOPHY

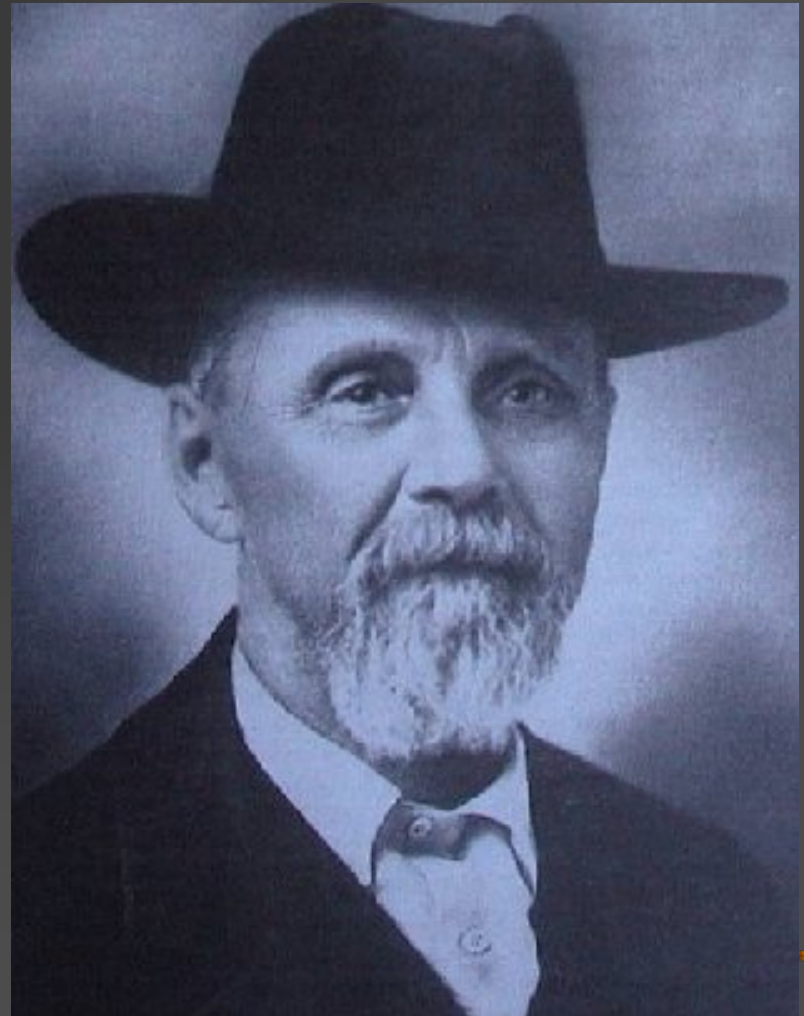
It is easy to relate to Still's dissatisfaction with medicine of the 1850s where:

- The germ theory had lost favor
- The most useful tool for house calls was a lancet for bloodletting
- Moliere (a French playwright) observed: "Most men die of remedies, not their diseases"
- People commonly died from : malaria, smallpox, typhoid fever, pneumonia, scarlet fever and typhus
- In 1860, Sir Oliver Wendell Holmes stated "If the whole "Materia Medica" could be sent to the bottom of the sea, it would be all the better for mankind and all the worse for the fishes"
- In 1864 Joseph Lister developed a method for antiseptis in surgery. After the death of 7 of Lister's children, he hated drugs for their impotency and became determined to find the answers on health and disease.
- At this time, Dr. Still was 37.

Andrew Taylor Still

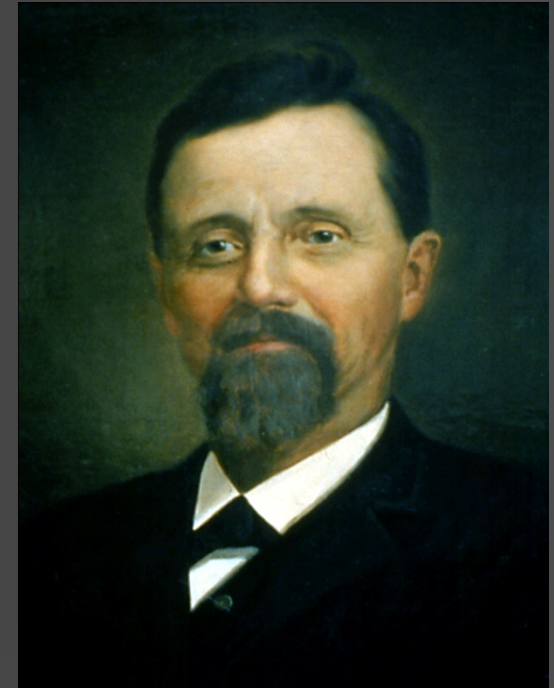
- Doctor
- Farmer
- Soldier
- Inventor

As a frontier physician , Dr. Still faced epidemics such as cholera, malaria, pneumonia, smallpox, diphtheria, and tuberculosis.



ANDREW TAYLOR STILL

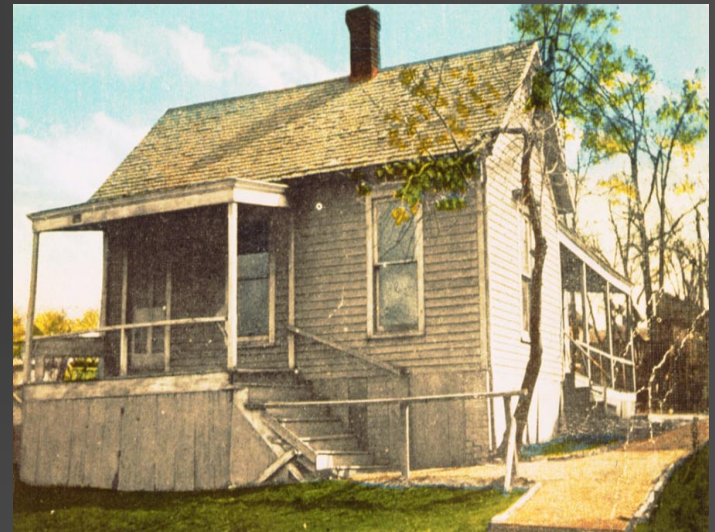
- For over 18 years Still practiced a traditional approach to medicine in Missouri, refining and developing his approach to medicine
- Still was a scientist of sorts and spent much time studying human remains and illness, looking for a structure – function approach to health
- Still came to believe in a drugless approach
 - Unlike homeopathy of the day, Still sought a scientific approach with reliable and efficacious diagnosis / treatment.



Still chose to differentiate his new philosophy from allopathic and homeopathic medicine of the day, and coined the name Osteopathy in 1874.

American School of Osteopathy

- Charter obtained in 1892 in Missouri
- The college is now known as the Kirksville College of Osteopathic Medicine
- The original charter allowed the award of an M.D. degree and or D.O. degree
- Osteopathy taught “disease is a natural manifestation of structural abnormalities, followed by physiologic dysfunctions”



FIRST SCHOOL OF OSTEOPATHY

- The first class was 17 men and women ranging in age from 18 to 65
- By 1897, enrollment had passed 500 students
- Unconventional for his day, Dr. Still accepted women and African Americans to his school.



Progression of the Osteopathic Profession

- First Recognized Nationally for the successes during the 1918 Influenza Epidemic
 - Great swine flu pandemic killed 650,000 individuals in the US and 40 million worldwide. In this pre-antibiotic era, weakened patients often developed bacterial complications. Allopathic treatment was calomel to “open the bowels” and strychnine for cardiac weakness
 - Osteopathic treatment consisted of manipulative treatments including those that promoted pulmonary function, isolation, hygiene, and fluids.
 - .2% mortality rate for osteopathic patients compared to 5-15% allopathic treatment
 - Of those with pneumonia, osteopathic physicians lost 10% compared to 25-60% reported by allopathic institutions.

Progression of the Osteopathic Profession

■ World War I

Osteopathic physicians were not allowed to serve. Ex-president Roosevelt wrote a letter in favor describing how his family had benefited from osteopathic treatment

- 1929 Pharmacology was added to osteopathic curriculum and pharmacologic treatment (when used) became standardized between the two professions while some other practices such as manipulation were not.

■ World War II

While the Armed forces remained closed to D.O.s, they were the physicians who remained at home and cared for many patients, including the rural areas and small communities who were often left without a physician. Osteopathic physicians provided the current standard care, with a focus on mind, body and spirit, and provided the additional manipulative therapies. The popularity of the profession grew.

Progression of the Osteopathic Profession

- Near the conclusion of WW II, the Director of Selective Service deemed D.O. physicians indispensable to maintaining the health of the civilian population
 - In the 1950s, the President of the AMA called for acceptance and removal of the stigma against osteopathic medicine and he chaired a committee to evaluate the quality of training. The committee reported no differences in quality of training between the two professions.
 - 1969 The first state supported school came into being
 - Michigan State College of Osteopathic Medicine
 - 5 schools existed at that time
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OSTEOPATHIC TENETS

While osteopathic medicine has advanced, Dr. Still's original philosophies have survived through Osteopathic Tenets:

1. The body is a unit

Applied today: disease in one area of the body affects the human as a whole.

2. The body has self-healing and self-regulating mechanisms

Immune, nervous, and circulatory systems are key to health.

3. Structure and Function are interrelated

While the structures above are key for internal function, the musculoskeletal system is just as key to the housing and the function of these systems.

4. Each patient is an Individual and requires an individual approach.

OSTEOPATHIC MEDICINE TODAY

- Licensed in all 50 states to practice the full scope of medicine
- Scope of practice includes examination, diagnosis and management; from prevention, to pharmacology to surgery, but with the “extra tool in the bag” osteopathic manipulation.
- Osteopathic graduates may choose any specialty from family medicine, pediatrics, and internal medicine (from primary care practice to specialties such as neurosurgery, cardiology, orthopedics, etc).



OSTEOPATHIC RESEARCH

- Original research departments established in 1898 focused on anatomical and physiologic function, focusing on spinal and nervous systems.
 - In 1938 a new technique of electromyography was developed to study spinal column dysfunction.
 - Osteopathic colleges have through the years focused their resources on primary care as a service to patients and have neglected their research mission.
 - Recently the Colleges of Osteopathic Medicine have committed to perform scientific research. We hope you will share that commitment.
 - AOA Accreditation now requires research to be done at all colleges
 - Texas College recently awarded the National Osteopathic Research Center to promote improved collaboration on research
 - OSTMED.DR a new on-line source for osteopathic literature developed - this provides the first opportunity to access the majority of osteopathic publications
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OSTEOPATHIC MEDICINE

- Virginia Campus was the 20th College of Osteopathic Medicine
- There are now 6 state supported and 20 private colleges of Osteopathic Medicine, and 3 branch campuses.
- Strong orientation toward primary care
 - Most schools boast (40-50%)
 - VCOM ranked 10th and 11th in producing primary care physicians
- Approx. 60,000 practicing osteopathic physicians in the U.S. today.
- Osteopathic manipulation is only a part of osteopathic medicine and not synonymous with the practice of osteopathic medicine. The osteopathic tenets are synonymous with osteopathic medicine, and the use of osteopathic manipulation is embraced in those tenets.

Largest States for Practicing Osteopathic Physicians

- Arizona >1,400
 - California >2,300
 - Florida >3,400
 - Illinois >2,000
 - Iowa >1,000
 - Michigan >5,000
 - Missouri >1,900
 - New York >3,000
 - Ohio >3,500
 - Oklahoma >1,400
 - Pennsylvania >5,300
 - Texas >2,900
 - New Jersey >2,800
 - Virginia now approaching 1000.
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National Osteopathic Medical Student Statistics

- Average age 24 – 27 on entry
- Average MCAT 24 – 28
- Average GPA 3.4 to 3.6
- Men/Women vary but most approach 50/50
- 20% married on acceptance, 43% married on graduation
- 37% are from communities of less than 50,000
- 18% are from Asian/Pacific island/Indian with less than 8% under-represented minorities (something we continue to work on).

Average National Basic Science and Clinical Curricular hours are very similar except osteopathic manipulation.

- Anatomy 183
- Pathology 148
- Physiology 118
- Microbiology 105
- Pharmacology 97
- Biochemistry 96
- Histology 64
- Neuroanatomy 57
- Immunology 20
- Genetics 14
- Microanatomy 14
- Epidemiology 12
- Ambulatory Medicine 83
- Clinical Medicine 275
- Osteopathic Principles and Manipulation 225
- Physician skills 95
- Cardiovascular System 58
- Psych & Behavioral Med 59
- Nutrition 17
- Ethics / Policy / Law 14
- Radiology 14
- Embryology 12
- Geriatrics 9
- Miscellaneous 117

Most Common Clinical Rotations for Colleges of Osteopathic Medicine Nationally

- Family Medicine
- Internal Medicine
- Pediatrics
- Surgery
- OB/GYN
- Radiology
- Orthopedics
- Geriatrics
- Anesthesia
- Critical care
- Emergency Medicine

Other Student Information

■ Board exams

- There are two boards in the United States (all 50 states) that lead to licensure:
COMLEX and USMLE
(M.D.s may only take USMLE)
- D.O. graduates may take COMLEX, and may take USMLE if they choose (but it is not required)
- The National Board of Osteopathic Medical Examiners (NBOME) was challenged in 1999 by Federation of State Licensing Boards as to validity, resulting in a formal study. Outcomes of study-demonstrated COMLEX reliability, to the satisfaction of Federation.

VCOM Mission

- **To provide medical education and research that will prepare globally minded, community focused physicians for the rural and medically underserved areas of Virginia, the Carolinas, and the surrounding Appalachian region.**
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“Recruit from”

Students most likely to fill the gaps in healthcare:

- Rural areas
- Medically underserved areas of Appalachia
- Likely to serve medically underserved populations:
 - US medical mission or other mission work
 - International medical mission work
 - Worked with medically underserved populations in US
 - (cultural or socioeconomic perspective)

The best and the brightest students



VCOM trains students in the rural and medically underserved regions.

VCOM has affiliation agreements with 20 hospitals throughout Virginia and the Carolinas where we hire faculty who will be teaching you in the third and fourth years. Residencies have been developed in 4 so far and 3 additional hospitals have dually approved residencies with OMNEE.



Return primary care physicians to the Appalachian region

With our hospital partners, VCOM continues to establish:

- Scholarships
- Loan repayment programs
- Provide an academic medicine resources and environment for our teaching hospitals.



College Facts



- VCOM is the 20th Osteopathic Medical College in the United States
- VCOM is accredited COCA, the accrediting body approved by the Bureau of Professional Education, to accredit osteopathic medical schools.
- VCOM received approval through the State Council of Higher Education for Virginia to enroll students since February 2002.
- VCOM completed all of the first 5 phases of accreditation with no deficiencies, (one of the first) and attesting to the commitment to a quality medical and research program.
- Maintains a collaborative agreement with Virginia Tech for research, faculty appointments (sharing) and student activities/services.
- The College is privately funded, requiring no state funds for operation.
- Will open a S.C. branch in 2011.