

SEPTEMBER 12, 2022

KAREN J. NICHOLS, DO, MA, MACOI, FACP, CS-F

©KJNICHOLS2022

Disclosures:

- Accreditation Council for Graduate Medical Education Board of Trustees
 - Chair 2020-2022 (First DO)
- American Osteopathic Association
 - President 2010-11 (First Woman)
 - President's Advisory Council Current
- American College of Osteopathic Internists
 - President 2000-2001 (First Woman)
- Midwestern University/Chicago College of Osteopathic Medicine
 - Dean 2002-2018 (First Woman)
- Private Practice Internal Medicine and Geriatrics
 - 1985-2002

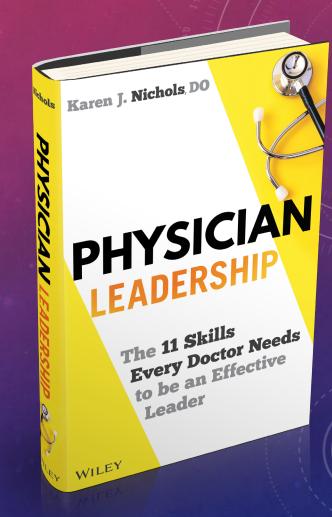
Disclosures:

Author, "Physician Leadership: The 11 Skills Every Doctor Needs to be an Effective Leader"

All royalties are donated to support the Karen J. Nichols, DO, L.E.A.D. Student Scholarship

\$5000 annual award

American Osteopathic Foundation since 2011



@KARENJNICHOLS

KARENJ.NICHOLS_DO

KJN@KJNICHOLS.COM



Karen J. Nichols, DO
Leadership Consultant and Speaker on
End-of-Life Care Issues



AGENDA

- How the osteopathic profession originated
 - Roots in public health
 - Minorities in medicine
- Snapshot of the current osteopathic profession
- Educational structure
- The osteopathic approach to patients



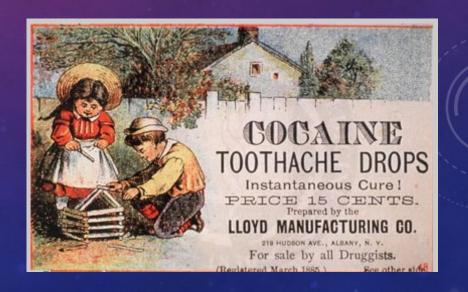
HISTORY OF OSTEOPATHIC MEDICINE... WITH ROOTS IN PUBLIC HEALTH

• "Millions of people before Newton and Galileo had seen apples fall and pendulums swing but practically none of them taught the world what those simple and familiar phenomena meant."

- "...did not invent a system of healing. Like the force of gravity, osteopathy was always present, familiar to everyone, waiting for a perceptive mind to unlock its secrets."
 - Lewis, John. "A.T. Still: From Dry Bone to the Living Man," (2012) Dry Bone Press, Blaenau Ffestiniog, Gwynedd, Wales, UK

MEDICAL APPROACH – LATE 19TH CENTURY

- Puke, purge, bleed, blister
- Arsenic, mercury to "kill" the disease
- Opium!



ALTERNATIVE MEDICAL CARE OPTIONS

- Dis-satisfaction with conventional medicine
- Homeopathy
- Eclecticism
- Thomsonianism
- Hot springs

- Artesian baths
- Mesmerism
- Herbs
- Cereals

DR. STILL'S APPROACH

- Dr. Still rejected:
 - "Medicines"
 - Alternative approaches

DR. STILL'S APPROACH

- Dr. Still promoted:
 - Natural emphasis
 - Exercise, fresh air, cleanliness, temperance (food-drink)
 - Alcoholism = illness
 - Recovery based on individual's level of health
 - Fore-runner of immunologic response
 - "Body has ability to heal itself"
 - Virchow Cellular Pathology
 - Public HEALTH, not harmful chemicals

"HEALTH CARE DOESN'T CREATE HEALTH"

- Genetics
 - 50%
- Social Determinants of Health
 - 40%
- Health Care
 - 10%

Berwick, D. "Getting Serious About Producing Health: The Ten Teams Challenge," JAMA, 2022, 327(9) 1865-1866.

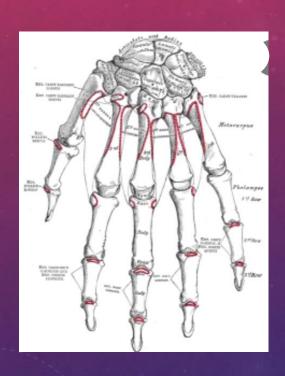
ANDREW TAYLOR STILL, MD

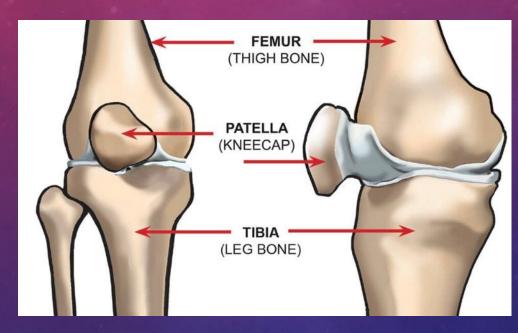
- Astute observer
- Physician
 - Preceptor-taught
- Civil War
 - Kansas Militia Major
- Baker University
- Outcast

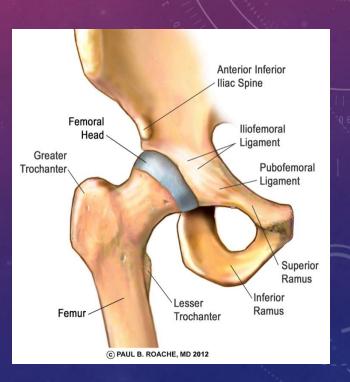


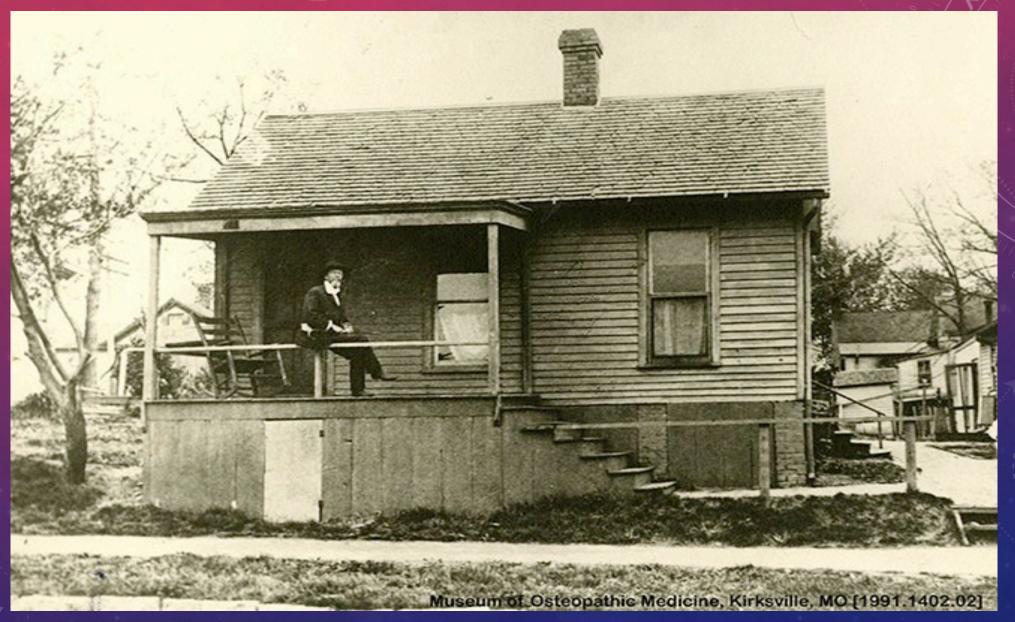
Museum of Osteopathic Medicine, Kirksville, MO [2003.13.01]

OSTEOPATHIC FOCUS — STRUCTURE/FUNCTION











Museum of Osteopathic Medicine, Kirksville, MO

• "To find health should be the object of the doctor. Anyone can find disease."

Andrew Taylor Still, MD, DO

CONTEMPORARIES

- William Osler, MD
- Charles Mayo, MD
- William Mayo, MD

ABRAHAM FLEXNER INCLUDED DO SCHOOLS

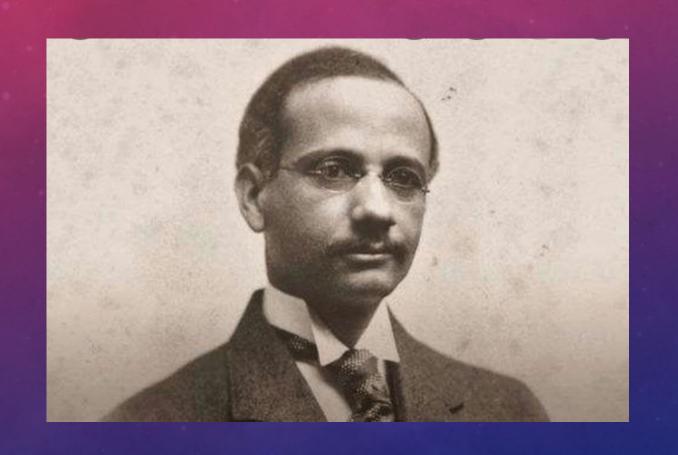
- Kirksville
- Des Moines
- Philadelphia
- Chicago
- Kansas City



Photo from Chicago College of Osteopathic Medicine - Midwestern University



FIRST AFRICAN-AMERICAN MAN TO EARN AN MD DEGREE IN THE US – DAVID JONES PECK, MD - RUSH UNIVERSITY-COLLEGE OF MEDICINE - 1847



FIRST WOMAN IN AMERICA TO EARN AN MD

DEGREE – ELIZABETH BLACKWELL, MD – 1849 –

GENEVA (NY) MEDICAL COLLEGE





FIRST AFRICAN-AMERICAN WOMAN TO EARN AN MD DEGREE IN THE US – **REBECCA LEE CRUMPLER, MD** – 1864 – BOSTON UNIVERSITY SCHOOL OF MEDICINE





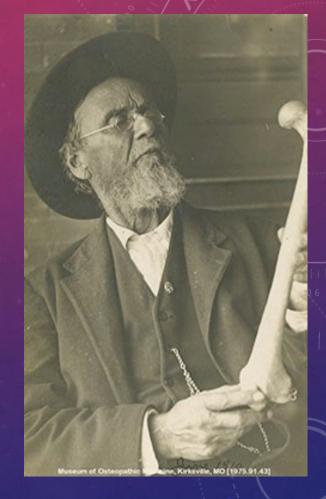
FIRST INDIGENOUS AMERICAN WOMAN TO EARN AN MD DEGREE IN THE US – SUSAN LA FLESCHE PICOTTE, MD – 1889 – MEDICAL COLLEGE OF PENNSYLVANIA





KIRKSVILLE, MISSOURI

- American School of Osteopathy
 - Established 1892
- A. T. Still University
 - Kirksville College of Osteopathic Medicine
- Johns Hopkins College of Medicine
 - Established 1893



Museum of Osteopathic Medicine, Kirksville, MO [1975.91.43]

ENCOURAGED WOMEN TO ENTER MEDICINE



Museum of Osteopathic Medicine, Kirksville, MO [1976.186.01]

"I opened wide the doors of my first school to women."

FIRST AFRICAN-AMERICAN WOMAN TO EARN A DO DEGREE – META L. CHRISTY, DO – 1921 PHILADELPHIA COLLEGE OF OSTEOPATHIC MEDICINE





First African-American man to earn a DO Degree – Weymouth Leopold Swainson, DO – practiced in Detroit in mid-century – details unclear

FOUGHT AGAINST SLAVERY

Dr. Still served in the Kansas legislature
Dr. Still helped make Kansas a FREE State

The Fiftieth Anniversary of the First Free State Territorial Cenislature.

mit the

Thirty-second Annual Meeting of the Kansas State Tistorical Society,

nettl be held to the

Hall of the Course of Representatives. Topela, Friday, December 6, 1987.

The Fiftieth Anniversary will be continued at Lawrence, Saturday, December 7, 1997.

Suretuors of the Constitutal Contributors of 1837.

- Omaz E. Lazamani, Marrier of the Council (Spinars), approprinting the "proprint - David (Solar), Whathaned Shareson, Verille (Cough), Escalaration Chen, Distributions, Markon (America) (Shareson of Greenwood), Carlos, Spinarson, Married Same, Markon (America) (Spinarson of Greenwood), Carlos, Spinarson, Spinarson
- H. Manne Moone, | morementing Louvenworth sounty in the Rose
- E. H. Minnetta, representing Severs and Nomalia.
- A. T. Binks, representing Desglar and Johnson.
- RAWALL J. BULKARE, representing the "eightness remaining exaction," or about the same as Control Less and represented to the Council.

Officers of the State Bistorical Burkety.

- Justo E. Mari, Waldin. Provident.
 General W. Vallet, Toolden. Ploof Vocapendided.
 General W. Gener, Michigan. Some Phoppendided.
 Invest B. General, Topics. Someoner,
 General W. Marrier, Topics. Someoner,
- With-W years and a subspaces publisher or office, and dealer quantitating in the most the delices. These are per Units-eath; the mostless, Of all dealers are personally a surprise of the contract of the contract of the dealers are presented in successions.

Still National Ostacpathic Meseum, Kirksville, MO.

EDUCATING BLACK STUDENTS

- Booker T. Washington Osteopathic Institute (Chicago) 1922
- District of Columbia College of Osteopathy 1924

SEGREGATED HOSPITALS

- Black Doctors
- Female Doctors
- Osteopathic Doctors



BARBARA ROSS-LEE, DO, FACOFP

- Notable female leader in academe
- Former Dean of Ohio University Heritage College of Osteopathic Medicine (1993 – 2001)
- First African-American female dean of a US medical school





SNAPSHOT OF THE OSTEOPATHIC PROFESSION



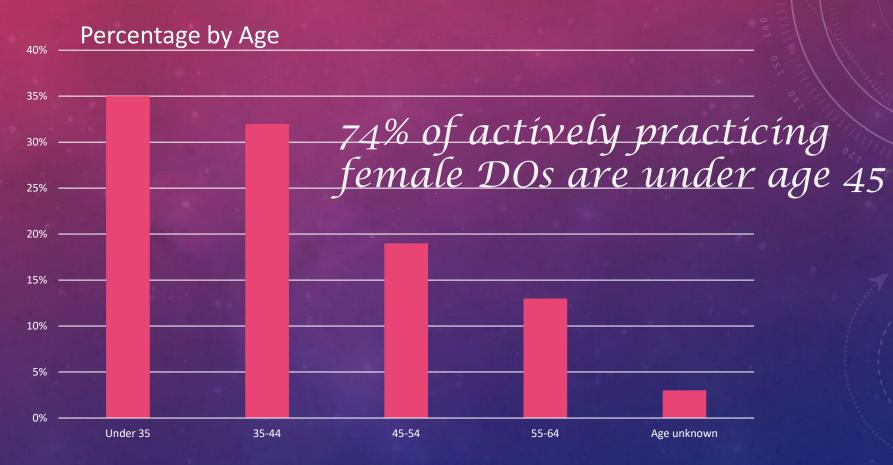


141,759 DO's* + 36,500 DO students = Total 178,259 DO's + students in US **(10% of all practicing physicians in the US)

^{*} Data From The Osteopathic Medical Profession (OMP) Report 2021-2022, Provided by the American Osteopathic Association

**Data from *Journal of Medical Regulation*, FSMB Census of Licensed Physicians in US, 2020, (2021) 107 (2):57-64.

ACTIVELY PRACTICING DO'S, BY AGE



Data From The Osteopathic Medical Profession (OMP) Report 2021-2022, Provided by the American Osteopathic Association

MINORITY CHALLENGES

- 1892 First DO school
- 1992 DO's = 5% of all US physicians
- 2020 DO's = 10% of all US physicians (FSMB official report)
- 2022 DO's = 12.7% of all US physicians (informal report)
- "Tipping Point: How Little Things Can Make a Big Difference"
 Malcolm Gladwell (2000) Little, Brown & Co., New York City

 "Taking students to the legislature"

OPPOSITION TO THE DO DEGREE

- The DO degree was strongly opposed by the MD establishment
- Attempts to squash the development of this profession led to "unintended consequences"

UNINTENDED CONSEQUENCES

- 1 − A. T. Still's ideas rejected
 - Started own school

UNINTENDED CONSEQUENCES

- 2 DOs not allowed to enlist in WWII, as physicians
 - Grew practices in US
- 3 California DO/MD organizations merge, 1962
 - US Civil Service Commission



OVERVIEW OF THE OSTEOPATHIC EDUCATIONAL STRUCTURE

OSTEOPATHIC MEDICINE EDUCATIONAL STRUCTURE

- 4 years of undergraduate education
- 4 years at COCA-accredited, DO-granting medical school
- Emphasis on structure/function/whole patient, including 200 hours of osteopathic manipulative medicine (OMM) instruction and clinical experiences
- Eligible to train in every ACGME-accredited sub/specialty
- Licensed physician for full practice of medicine/surgery 50 states

SAMPLE REQUIREMENTS TO APPLY TO DO SCHOOLS

Course	Semester/Quarter Hours
Biology with Lab	8/12
General Chemistry with Lab	8/12
Organic Chemistry with Lab	8/12
Physics with Lab	8/12
English Composition	6/9

SAMPLE CURRICULUM — YEAR 1

- Gross Anatomy and Embryology
- Histology
- Biochemistry
- Physiology
- Principles of OMM (100 hours of instruction)
- Physical Exam Skills
- Patient Symptom Presentations
- Neuroscience
- Interprofessional Education
- Behavioral Health Assessment

SAMPLE CURRICULUM — YEAR 2

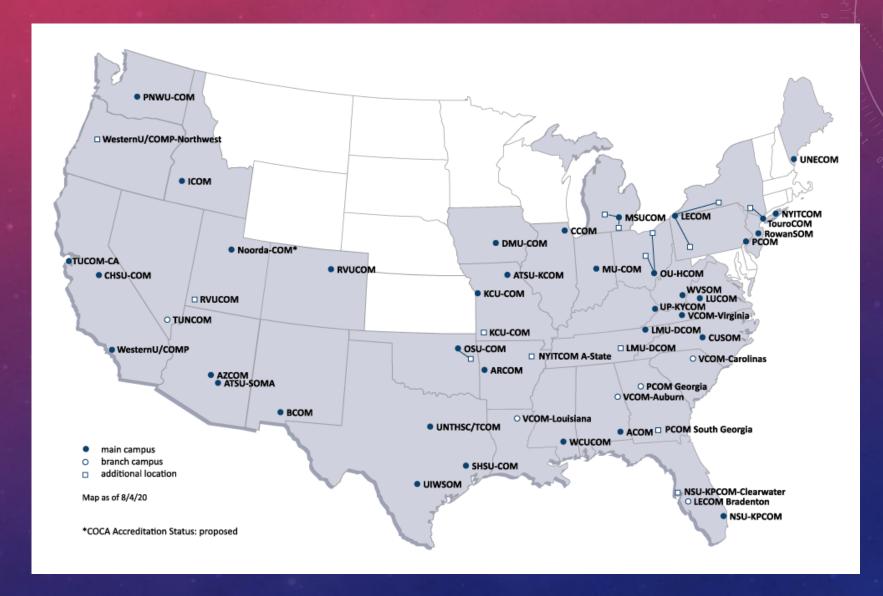
- Clinical Symptom Integration
- Simulated Patient Care
- Microbiology
- Immunology
- Pathology
- Pharmacology
- Application of OMM (100 hours of instruction)
- Mental Illness and Treatment

SAMPLE ROTATIONS – YEARS 3 & 4*

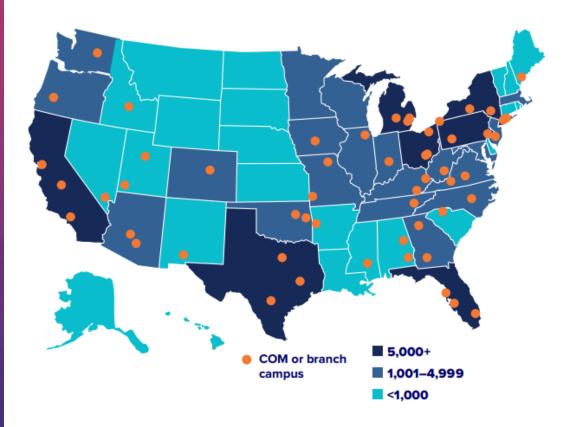
- Family Medicine
- Internal Medicine
- Obstetrics and Gynecology
- Pediatrics
- Psychiatry
- Surgery
- Emergency Medicine
- Osteopathic Manipulative Medicine
- Clinical Skills Assessment

*Application of OMM included and assessed in all rotations

60 CAMPUSES – 39 COLLEGES OF OSTEOPATHIC MEDICINE



DOs in Active Practice



Source: Commission on Osteopathic College Accreditation; AOA Physician Masterfile, May 31, 2021.

TOP 10 US-MEDICAL SCHOOLS FOR % OF GRADUATES PRACTICING IN A PRIMARY CARE FIELD 5-7 YEARS AFTER COMPLETING RESIDENCY



Phillips, Bazemore, Westfall, (2021) "Increasing Transparency for Medical School Primary Care Rankings – Moving from a Beauty Contest to a Talent Show," *JAMA Health Forum*, 2(11), e213419

USNWR MEDICAL SCHOOLS WITH % OF GRADUATES PRACTICING PATIENT CARE IN RURAL AREAS



www.usnews.com, Medical Schools with Graduates Practicing Patient Care in Rural Areas, Ranked in 2022, part of Best Medical Schools (April, 2022)

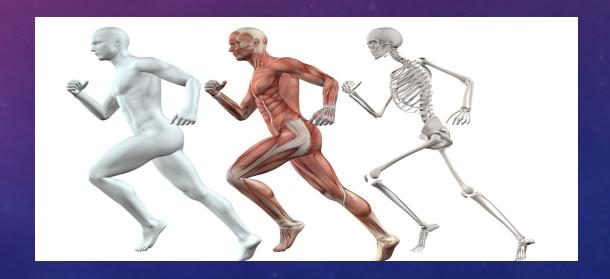


THE OSTEOPATHIC APPROACH

THE QUESTION FROM AN MD

"I focus on the whole person, and I care about my patients."

What is the difference?



THE OSTEOPATHIC PERSPECTIVE

The difference is the osteopathic perspective based on the osteopathic tenets.

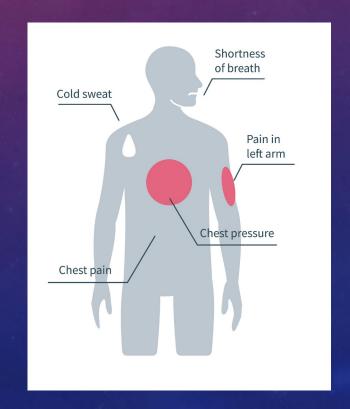
- 1. The body is a unit; the person is a unit of body, mind, and spirit.
- 2. The body is capable of self-regulation, self-healing, and health maintenance.
- 3. Structure and function are reciprocally interrelated.
- 4. Rational treatment is based upon understanding the above.

1. The body is a unit; the person is a unit of body, mind, and spirit.

- All systems of the body are affected by a disorder of any one system.
 Not a reductionist approach.
- A disease is not a thing. It is a process...distorting normal anatomic and physiologic features.

- 2. The body is capable of self-regulation, self-healing, and health maintenance.
 - Immunizations trigger the body's own immune response.
 - Scoliosis is the body's attempt to maintain balance and center of gravity.
 - The body generates prostaglandins, endorphins, enkephalins and longacting ligands.
 - The body maintains blood pH, adjusts HR maintain blood pressure.

- 3. Structure and function are reciprocally interrelated.
 - Myocardial Infarction
 - o Left arm pain
 - "Whiplash" cervical spine
 - Headaches, vertigo, nausea



- 4. Rational treatment is based upon understanding the first three tenets.
 - The patient is best served when a variety of diagnostic and therapeutic modalities are taken into consideration to be used as appropriate.
 - Not reductionist.

THE OSTEOPATHIC PERSPECTIVE FROM DAY ONE

Remember: Organs are part of connected and integrated systems and do not function in isolation, each in their own separate "baggy."







Utilize FIVE domains of science:

- Biomedical Science
- Clinical Science
- Biomechanical Science
- Health Systems Science
- Complexity Science

- There are no DO "facts"
- There are only medical facts seen from the osteopathic perspective
- Focus on in-depth relationship of structure/function



Diagnosis

- Utilize all standard diagnostic approaches
 - Understand relationships
 - Recognize patterns
 - May also use hands to clarify structure

Treatment

Use of all standard treatment approaches



Treatment

- Use of all standard treatment approaches
- Adding Osteopathic Manipulative Treatment Techniques – when and if applicable





TYING IT TOGETHER!

Understanding structure and function...

...promotes full appreciation of the patient...

...and caring for the WHOLE person!



ACADEMIC MEDICINE DECEMBER 2005

"...from the start, the culture of caring competed with a quest to objectify medicine in scientific terms, and as scientific discovery leapt forward, caring was progressively eclipsed."

Authors: Richard A. Cooper, MD (Penn) & Alfred I. Tauber, MD (Boston U)

GROWING FOCUS ON EMPATHY AND COMMUNICATION

- Mayo Clinic survey*
 - 7 traits of the ideal physician
 - "personal interest in me as a person"
- Cleveland Clinic video**
 - Adds the back story of people seen in a hospital/clinic

^{*}Bendapudi, N. Mayo Clinic Proceedings, March 2006; vol 81: pp 338-344. Li, J. Mayo Clinic Proceedings, March 2006; vol 81: pp 294-296. News release, Mayo Clinic.

^{**&}quot;Empathy: The Human Connection to Patient Care" - YouTube - Cleveland Clinic (Posted February 27, 2013)

PATIENT-CENTERED CARE

- Emphasis on patient-centered whole person/whole body integrated assessment, care and caring is **embedded** in all osteopathic medicine education/training/practice.
- Every graduate
- Every specialty

