

Michigan State University  
College of Osteopathic Medicine  
Family and Community Medicine and Internal Medicine  
Division of Geriatrics  
[www.com.msu.edu/fcm](http://www.com.msu.edu/fcm)

HRSA Grant: D54HP23284-05-00

Project Investigator: Carol Monson, DO, MS, FACOFP

*THE OPTIMAL AGING AND MIND-BODY-SPIRIT CURRICULUM SERIES:  
MODULES FOR MEDICAL AND HEALTHCARE PROFESSIONAL  
EDUCATION*

***MODULE 8: Supplemental Information and Resources***

Jan Bocskay, MSW, MSCMH

June 2017

Copyright © 2011. Michigan State University, College of Osteopathic Medicine, Family & Community Medicine, Division of Geriatrics. All rights reserved. The Geriatric Fellowship (GF) Curriculum was developed through funds from the Bureau of Health Professions, Health Resources, and Services Administration (HRSA). Grant # D54HP23284. If you would like permission to use any portion of this material, please contact Director/Principal Investigator Carol L. Monson, DO at [Carol.Monson@hc.msu.edu](mailto:Carol.Monson@hc.msu.edu)



## Table of Contents

Appendix A.....	4
Appendix B.....	13
Appendix C .....	21
Appendix D .....	25
Appendix E.....	35

## Appendix A

### **The Story of Andrew T Still (1828-1917) and the History of the Discovery and the Development of Osteopathy**

In 1897, Andrew T Still, the founder of Osteopathy wrote the following words in his autobiography, giving a stern message to the reader:

...if you wish to read my story, please read as I write it, and not the garbled account of some newspaper representative.

The information included in this review of the life of Andrew T. Still comes only from his autobiographies and not from any other sources. It should be noted that he wrote a second edition of his autobiography in 1908, after the first edition was burned in a fire. He was pleased that, in those intervening ten years, the practice of Osteopathy had begun, had taken hold, and had students who were successfully:

...combating disease as Thinkers and Engineers who are well qualified to conduct the human body from disease to health.

Who was Andrew T Still? Born in 1828 in Virginia, Still spent much of his youth acquiring his early education in log schoolhouses. He also was fond of his gun, considered a good judge of dogs, and admired the accomplishments of the Western pioneers, who settled and civilized this country.

In his boyhood, he had what he considered being his first discovery in the science of Osteopathy. When he was young, he began his life-long dislike of drugs. One day when he was about ten years old, he had a bad headache so he made a swing out of some rope between two trees, but his head hurt too much to swing. Therefore, he let the rope down to about 8-10 inches above the ground, threw a blanket over it, and used the rope as a swinging pillow for his head. He fell asleep with his neck resting against the rope and woke up later, with his headache gone. He had no idea of why this worked, but in later years, he applied the same remedy when he felt a headache coming on. Eventually, much later in his life, when he obtained a better understanding of anatomy,

he realized that he had suspended the action of the occipital nerves, and provided relief to the arteries and veins, with the resultant easing of his headache. For the rest of his life, he was convinced that:

...the artery is the river of life, health and ease, and if muddy or impure, disease follows.

Still's frontier experience was valuable to him in a number of ways, one of which was that, long before he learned anatomy from books, he learned about muscles, nerves, veins, tendons, bones and organs from skinning squirrels, deer, and other animals used for food. He considered this a course in natural history, with all of nature laid before him. He learned that ammonia or some other alkali would destroy a snake's venom, and in sufficient quantity, even kill the snake. He also learned that sulfuric acid, three parts water, would eliminate the effects caused by being bitten by a rabid dog. With such small yet practical steps, the science of osteopathy was born. He coupled this practical education with college and medical school training.

Still married in 1849 and, in 1861, he joined the Northern Army in the Civil War. After the War, however, he found medicine to be a great failure, often leading to drug abuse and addictions, and so he began to study Man in earnest, as he sought to learn about physiology by dissecting dead bodies exhumed from Indian graves. He calmed his conscience by arguing that it was being done for the good of science, and so that others might benefit, but it is clear that he struggled with this method of learning. He also improved his anatomical learning through constant study of the animals of the frontier. Three members of his family died (two children and an adopted child) from disease, and from his pain, he built upon his early religious training and became even more convinced that God was a God of truth, and that all of His works are harmonious, spiritual and material. Most importantly, this led him to the conclusion that God had placed within the body the means to heal itself of anything that ailed it, and that the body can and should be allowed to heal itself, rather than to attempt healing through the use of drugs. He concluded that nature could provide all necessary remedies and that man should study and use the drugs compounded in his own body.

Still also thought that the human body is a machine, and he built the science of osteopathy upon this principle. He began the study of machinery in 1855 and continued this until 1870, and brought these mechanical principles into his medical practice. He studied anatomy, physiology, chemistry, and mineralogy. He invented a new type of churn that caused less pain to use, and then moved on to the study of how to make the human machine more efficient. This led to the development of the initial osteopathic manipulation techniques, which Still believed could help the body to heal itself. He learned that his techniques worked on cases of eye infection, pneumonia, and asthma, among other things. With this in mind, Still began to think that some disruption of normal blood flow could cause disease and this led him to ask, "What is fever?" After many years of experimentation and observation, he concluded, in a position rather unorthodox for the times, that:

...there is no such disease as fever, flux, diphtheria, typhus, typhoid, lung-fever, or any other fever classified under the common head of fever or rheumatism, sciatica, gout, colic, liver disease, nettle-rash, or croup, on to the end of the list, they do not exist as diseases. All these, separate and combined, are only effects. The cause can be found and does exist in the limited or excited action of the nerves that control the fluids of part or the whole of the body....All diseases are mere effects, the cause being a partial or complete failure of the nerves to properly conduct the fluids of life.

Having solved what he considered the great problems of osteopathy and having established the science in his own mind, he decided to introduce his new discovery and remedy for ills to the public. In 1874, Still officially initiated the science of osteopathy, and he was satisfied that, for the next 25 years, it withstood all opposition and grew in acceptance.

Although occasionally despondent that his ideas were not always accepted, Still worked alone, except for his four sons, in his investigations into how to treat maladies until 1892. He heard much talk, good and bad, about his methods of treatment, but he paid no attention to such comments, and continued his studies and development of his

ideas. The results were better than he expected and his practice steadily grew. He also traveled to small towns, to help treat the sick. A father asked him if his son could travel with him, to learn his methods, and so Still charged him \$100 and took on his first paying student. The youth knew nothing of anatomy and had had a limited education, so Still told him to get a copy of Gray's Anatomy and learn the bones and so forth to get a complete understanding of anatomy before he could be of any use to Still. Still also began to teach him some principles of osteopathy, and in about a year, the youth was able to assist Still in his travels.

A few months later, a doctor from Edinburgh, Scotland came to Still and wanted to learn about osteopathy, which he had heard about from others all across the state of Missouri. They had a long discussion about ways to treat people, and science, and law, and many other things, and they hit it off. They talked about opening a small teaching school to teach anatomy to teach Still's sons and daughter, and the Scottish doctor wanted to learn osteopathy, so they struck up a trade. They started a four-month program of anatomy, and enrolled 10 students. Some of the students did not finish the program, and Still learned that if a student is allowed to go into clinics and operating rooms before having a solid understanding of anatomy, he cannot clearly determine which cures work for which conditions. Thus another basic principle of osteopathy was born.

From the very beginning, Still accepted women into his program, and he believed that they proved to him that:

...if man is head of the family, his claim to superiority must be in the strength of his muscles and not in his brain.

The women did well in their classes and studies and he considered them every bit as worthy of diplomas as any of the gentlemen who studied with him.

In 1894, the first American School of Osteopathy was incorporated in the State of Missouri and when we look at these first articles of incorporation, we see the beginnings of some important osteopathic principles. The object of the corporation was to:

...establish a College of Osteopathy, the design of which is to improve our present system of surgery, obstetrics, and treatment of diseases generally, and place the same on a more rational and scientific basis, and to impart information to the medical profession, and to grant and confer such honors and degrees as are usually granted and conferred by reputable medical colleges.

The Board of Trustees was given the authority to appoint a faculty to teach:

...such sciences and arts as are usually taught in medical colleges, and in addition thereto, the science of Osteopathy.

And also:

...to grant diplomas to all graduates who shall attain an average grade of 90 per cent on a scale of 100 per cent, in each and every branch required to be taught and studied in the curriculum of said College. All diplomas granted shall show the grade made in each branch taught.

After 25 years of practice, Still declared himself, with some humor, to be the oldest Osteopath alive, and considered that he had studied the science of osteopathy more than all persons then living combined! He thought that he had a responsibility to impart the knowledge that he had painstakingly learned over his 25 years of practicing and observing more than 100,000 cases. He had drawn conclusions about how to treat various conditions and when to treat them, both successfully and unsuccessfully, how much force to apply, and what effects to expect based on various conditions of treatment.

Still once posed an often-asked question: what is the object of moving the bones, muscles, and ligaments that are suspending the powers of the nerves and so on? He said a common answer was to open up all spaces through which nerves, veins, and arteries convey elements of life and motion, but he said this answer fell far short of the complete truth. He rhetorically asked if you or I would be satisfied to know we had simply given the sufferer a good shaking up, had pulled arms and legs, feet and hands, back and thumbs and fingers, and kneaded the chest and abdomen? His answer was



no, we would also want to have knowledge of the chemicals in the body and how they can aid in healing. He suggested it is important to first allow the lymph system to do its work, then ending with albumin and fibrin, thus clearing away old sick material and allowing new healthy material to take its place. Thus, beyond knowledge of how to manipulate bones is needed an understanding of how and when to allow body chemicals and fluids to do their work. Still always saw the body in a holistic way, with each part having a role to play in health.

About half of Still's autobiography consists of remarks he made each year to the faculty and students of his college. These remarks are of interest to read because so many of Still's opinions were unorthodox for his times and original in nature. Generally, they consist of his explanations of how and why he developed the science of osteopathy, the problems faced in general by the medical sciences and the general dependence on drugs for treatments. His remarks also include many allegorical stories, testament to the fact that he was the son of a minister who grew into a man of vision.

One delightful poem was recited by a little girl prior to an address he gave on his 69<sup>th</sup> birthday. It is not clear who is the author of this poem, but in his remarks, Still said parents should teach this poem to their children, and they would have less use for war!

#### THE RHYME OF THE BONES

*How many bones in the human face?*

*Fourteen, when they are all in place.*

*How many bones in the human head?*

*Eight, my child, as I have often said.*

*How many bones in the human ear?*

*Three in each, and they help to hear.*

*How many bones in the human spine?*

*Twenty-six, like a climbing vine.*

*How many bones in the human chest?*

*Twenty-four ribs, and two of the rest.*

*How many bones the shoulders bind?*

*Two in each; one before and one behind.*

*How many bones in the human arm?*

*In each arm one, two in each forearm.*

*How many bones in the human wrist?*

*Eight in each if none are missed.*

*How many bones in the palm of the hand?*

*Five in each, with many a band.*

*How many bones in the fingers ten?*

*Twenty-eight, and by joints they bend.*

*How many bones in the human hip?*

*One in each, like a dish they dip.*

*How many bones in the human thigh?*

*One in each, and deep they lie.*

*How many bones in the legs at the knees?*

*One in each, the knee pan, please.*

*How many bones in the leg from the knee?*

*Two in each – we can plainly see.  
How many bones in the ankle strong?  
Seven in each, but none are long.  
How many bones in the ball of the foot?  
Five in each, as in the palms were put.  
How many bones in the toes half-a-score?  
Twenty-eight, and there are no more.  
And now, all together, these many bones fix,  
And they count in the body two hundred and six.  
And then we have in the human mouth,  
Of upper and under, thirty-two teeth.  
And we now and then have a bone I should think  
That forms on a joint, or fills up a chink.  
A Sesamoid bone, or a wormian we call,  
And now we may rest, for we've told them all.*

Still considered that the greatest struggle of his entire life was to maintain confidence and to remember that God had put into each person the brain and all the qualities necessary to make a good living for himself and others, provided that he made good use of his own gifts. It most certainly can be concluded that Andrew T. Still made good use of his own gifts, developing as he did out of his own observations and experiences, the science of Osteopathy, which continues, nearly 150 years later, to be a successful and rewarding branch of medical science.

*Source Document: Still, A.T. (1908). Autobiography of A.T. Still. Kirksville, MO: A.T. Still.*

## Appendix B

### **Andrew Taylor Still, A Biographical Review from Norman Gevitz's book The DOs: Osteopathic Medicine in America, 2004**

Norman Gevitz, a medical historical sociologist, became interested in the difference between MDs and DOs while in graduate school in sociology at the University of Chicago, where he did his PhD thesis on the difference between the two professions. In 1982, his thesis was published as a book, and in 2004 was reissued in a second edition with updated information. The DOs: Osteopathic Medicine in America presents the history of the osteopathic profession from its beginnings in the nineteenth century to today and has been continually in publication since 1982.

The book is an excellent resource regarding information about the osteopathic profession and the role it has played - and is playing – in medicine in this country. We recommend it to all osteopathic students, doctors, and others interested in medical history. One of the issues dealt with is as relevant today as it was in 1982 and in 2004: whether osteopathic medicine can “carve out for itself a continuing and distinctive role in the American healthcare system and maintain its professional autonomy.” Gevitz has studied, researched and written about the osteopathic profession for more than 40 years, and his insights and commentary are solidly based in an understanding of the profession and the challenges it has faced over time. Our purpose here, however, is to provide biographical information about the founder of the osteopathic profession, Andrew Taylor Still. Information will be placed in the context of a brief overview of medical thought at the time, and is drawn from Gevitz's book The DOs: Osteopathic Medicine in America, 2004.

Andrew Still always maintained that the idea for his approach to medicine came to him in a single moment of inspiration. The idea was that most diseases were directly or indirectly caused by vertebral displacements and that elimination of the displacement through spinal manipulation would remove the symptoms of pathology found elsewhere in the body. Out of this one idea, a lifetime career for a man developed and a whole profession was born.

Still was born on August 6, 1828 in Jonesville, Virginia, but moved to Tennessee in 1834, and to Missouri in 1837, where his father had calling as a Methodist preacher. Still was the third of nine children and, to the degree possible, his father tried to make sure his children received education in each place they lived. A Methodist preacher did not make much money, and Still's father supplemented his income with proceeds from his farm and a continuing medical practice, which he had started back in Virginia. Much of Still's time as a child was spent on farm chores, with occasional forays into hunting. In 1851, Still's father was reassigned yet again, this time to Kansas. Still stayed behind for a time, with his wife, on his own farm. Two years, and two children later, he decided to join his father, and it was here, at a mission to the Shawnee Indians, that Still began to study and practice medicine under his father's guidance.

Still also became politically active in the abolitionist movement leading up to the Civil War, and was elected to a quasi-legal state legislature, prior to Kansas being admitted to the Union just before the Civil War started. During the Civil War, Still enlisted for the Northern cause, serving several roles, including hospital steward, as well as seeing some military action. Later in life, Still humorously described how a couple of musket balls shot at him had been perilously close to ending his life, moving through his clothing, and he pointed out how closely the rebels had come to shooting osteopathy!

When Still began his medical career in 1854, his medical education consisted of work at his father's side and the study of several medical texts in subjects such as anatomy, physiology, surgery, and the *materia medica*. His first patients were the Shawnee, both alive and dead, since he learned a great deal of anatomy through the study of Shawnee who had passed away, even though his conscience bothered him about this. He also learned anatomy through the study of animals on his farm and those that he hunted, and he learned through his Civil War experiences in treating trauma and disease. There are no records to support, and there is some doubt as to whether Still ever attended a formal medical college, but copious anecdotes detail his knack for learning from real-life experiences.

Prevailing medical practice in the mid nineteenth century was most often based on effects, and treatment consisted of efforts to remove symptoms. Drawing blood was common as was the use of calomel (a mercury compound that was cathartic) and other toxic agents. Use of calomel when he was 14 loosened Still's teeth, causing him to need a partial denture for the rest of his life. Still questioned but used many of the ineffective treatments of the time, until tragedy struck his family, in the form of spinal meningitis. Following accepted practice to not treat loved ones, he let others do so, but he watched helplessly while three members of his family died. He did not immediately abandon accepted methods of treatment for another ten years, but this is when he began his life-long search for alternative systems of practice that were more effective and less harmful to the human body.

Still explored methods such as Samuel Thompson's theory that disease was caused by the body's loss of heat. Perhaps Thompson's more lasting legacy was leading a movement that had state legislatures removing the requirement for medical licensing, thereby allowing anyone to practice medicine anywhere in the country without repercussion, a situation which lasted for several decades.

Still also dug deeply into homeopathy, which espoused the adage, "like cures like" and dosed patients with very small amounts of substances deemed able to remedy certain diseases. This was also when the term "allopathy" arose, referring to most medical doctors and orthodox medicine, as opposed to homeopathy. Although originally homeopathy was taught in allopathic medical schools, eventually homeopaths were expelled, and started their own schools and colleges to train people in their profession. The schools, however, were never funded as well, and were not as good, or as thorough, as their allopathic counterparts were.

Alternative movements were never as popular as mainstream medicine, comprising perhaps 15% of practitioners at most, but Still came to realize that these alternatives often, and most importantly, caused less harm than generally accepted medical treatments, even though they often were just as ineffective. Still began to question whether drugging of any type, whether toxic or natural, was necessary. Bolstered by his

religious beliefs, he even questioned whether the use of alcohol was moral or effective; and so he began to look in directions other than dosing as a form of treatment.

As is the case today, there were many different forms of medical treatment available in Europe and the States. Still was eventually drawn towards the practices of Franz Mesmer, an Austrian physician who, in the late eighteenth century, had “postulated that an invisible universal magnetic fluid flowed throughout the body and that too much of not enough in either a part or whole was one major cause of disease, particularly nervous disorders. The only rational course of treatment, therefore, was to restore the fluid to its proper balance.” This was done through the use of passing hands or magnets over the body. Mesmer’s treatment methods became increasingly dramatic and he was eventually discredited, but some of his ideas remained in use and out of some of his ideas grew the practice of hypnosis.

Magnetic healing came to the United States in 1836, and inspired, among others, Mary Baker Eddy, the founder of Christian Science. Spiritualism also became conjoined with magnetic healing, in another stream of thought. Still never totally espoused any of these modalities, although he was familiar with them. Several of the ideas in magnetic healing, however, made a great impression on him: (1) using the metaphor of man as a divinely ordained machine; (2) the definition of health as a harmonious interaction of all the body’s parts and fluids; and (3) the use of spinal manipulation. Still had a different idea, however, about the nature of fluids in the body, and he came to believe that it was the free flow of blood throughout the body that gave rise to health.

In 1874, Still severed his ties to regular medicine, which shocked his friends and colleagues. After being ostracized, shunned, read out of his church, and denied opportunities to explain his theories of treatment at the college he helped to found, he moved to Kirksville, Missouri, where he found some small acceptance of his unorthodox ideas. In the fall of 1876, he contracted typhoid fever, and was seriously ill for six months. After he recovered, he realized he needed to do more to pay off his debts and support his family, so he became an itinerant physician. His relatives offered to help pay some of his expenses, if he would return to orthodox medicine, but he refused.



During the 1870s, Still also became interested in bone-setting, another form of manipulative treatment used in orthopedics. Bonesetters dealt with dislocations, and manipulation of diseased joints, believing that these conditions were caused by a bone being out of place. Regular doctors ridiculed this, but some patients did indeed improve with this treatment. Eventually, bone setting was considered useful for a select number of conditions.

It is not known how Still learned bone setting, but in the 1880s, he advertised his services as “the lightning bone-setter.” As with most of his education, it is likely that he learned this by watching others practice this mode of treatment. However, while practicing bone setting, Still made a critical discovery. He realized that the sudden flexion and extension procedures used in bone setting were helpful not only to orthopedic problems, but that they also contributing to healing other conditions in a reliable effective way. He treated a woman for asthma in this way, and she returned a month later with no pain or asthma. This set him on a new way of thinking about how to heal the human body, and he started treating many conditions by manipulation of the spine. He combined major ideas in bone setting with ideas from magnetic healing, and developed his own unique system of healing.

Still often traveled with one or more of his sons as he went around the county. Some people thought he was “a mysterious being, crazy, or at least daffy,” or otherwise strange, but they generally responded well to his lectures, demonstrations, and treatments. Unusual recovery from odd ailments in people led to word-of-mouth spreading of stories about Still, and by the end of the 1880s, he was usually received with local excitement when he arrived in a town. “Still had become a charismatic figure.” His success elsewhere led to greater acceptance and success back in Kirksville, as well. He set up a local infirmary, and soon people were coming to him instead of his having to travel to them. He also finally came up with a new name for his new form of treatment. After considering characteristics of allopathy, hydrotherapy, and homeopathy, he decided to call his system osteopathy (combining os for bone and the idea of pathology).

The next thing he did was to open up the American School for Osteopathy in 1892, where individuals could take a six-month program to learn Still's methods. Even in that first class of 21 students, there were men and women eager to learn. Still often reminded his students that the patients that came to them had usually unsuccessfully tried many other treatments with many other doctors before coming to osteopathy, and it was often the case that osteopathy was able to do more for them than any of the other methods. As word spread, and as anecdotes of successful treatments increased, more and more infirm people made the trek to Kirksville.

As attention grew of the successes at the infirmary, so too grew the opposition. The Missouri State Medical Association determined to put a stop to this business. Several legislative efforts were made to put limits on who could do medical treatment and who could do manipulation and establishing requirements about what constituted a real medical education (Hint: it had to occur in a reputable medical school). However, Still had developed such a following that it was possible to defeat or derail all of these efforts. Still then went on the offensive and worked with the Legislature to establish a legal basis for osteopathy in Missouri. The Legislature passed such a bill, but it was vetoed by the Governor with the reasoning that osteopathic doctors were insufficiently educated.

Since only three classes had graduated from Still's School for Osteopathy, he did not have enough evidence to refute the charges, and he realized he needed to change the way things were done. Instead of a six-month program, he changed the program to four terms of five months each. Almost every subject taught in "reputable medical schools" would now also be taught at the American School for Osteopathy. Subjects taught included anatomy, physiology, surgery, theory and practice, midwifery, histology, chemistry, urinalysis, toxicology, pathology, and symptomatology.

Still and his supporters then again tried to get legislation passed that would make osteopaths and osteopathic treatment legal in Missouri. This time, in 1897, they succeeded. A bill was introduced into the Legislature, passed, and signed by the Governor (This was a different Governor, one who had received successful osteopathic

treatment!). The entire town of Kirksville celebrated for a full day when news of the new legislation was received.

Now that legalities were taken care of, the school quickly grew, and within a few years, there were more than 700 students in attendance. This led to the hiring of more instructors, which also led to more elaboration of the basic principles of osteopathy. Where Still had based his initial ideas on bone-setting and homeopathy, now other streams of thought from more accepted forms of treatments were incorporated as foundation to the basic precepts and practices used in the curriculum and therefore they were also added to the profession. Although Still was not always happy about it, he did not interfere, and so his faculty “built osteopathy upon an intellectual base broader than the one Still was capable of constructing himself.”

As the school grew, and as the number of graduates increased, they spread out across the country, and used different methods to make the public aware of their services. The first legal action regarding a DO practicing in the community occurred in Red Wing, Minnesota, and involved Andrew Still’s son Charles. He arrived in the town to find himself in the midst of an epidemic that local doctors had diagnosed as diphtheria. Charles Still was called upon to treat someone, and that person quickly recovered after manipulation of the neck shoulders and head. He was soon asked to treat more than others, which he did, with only one fatality. The State Board of Health authorized his arrest because they said he was practicing without a license, even though his methods were clearly successful. By the time the case came up for review, Still had so much public support, the MD who had initiated the case dropped it.

Many cases in other communities and states followed. The issue generally raised was what constitutes medicine, and whether there should be a narrow or broad definition. DOs contended it meant the practice of administering drugs, while MDs considered the definition to include anyone who diagnoses disease and prescribes or applies any sort of treatment. MDs sought to prohibit the new profession and DOs sought to establish legal guidelines for it. Battles were fought in many states. Even Mark Twain, in 1901, took a stand in favor of DOs, speaking to the New York Legislature, and in a private

letter saying “ I want osteopathy to prosper; it is common sense and scientific and cures a wider range of ailments than the orthodox doctor’s methods can reach.” However, the American Medical Association, which was making progress absorbing homeopathy and other eclectic approaches, saw osteopathy as yet another competitor.

While all these legal battles were going on, graduates of Still’s College moved elsewhere and were starting their own schools in various states. Schools provided different programs, length of training, and costs. From the beginning, women were accepted as students, which gave them a route to become a doctor, since they generally were denied entrance to most of the allopathic schools.

Still did not always agree with these other schools, their curriculum, or the way in which they taught, but the movement had grown beyond him and his control. A new profession had been born, and was growing and developing in new, innovative, and unpredictable ways. Many of the initial legal and inter-professional battles portended issues that have dogged the profession ever since, as it continues to this day to deal with differences of opinion with individuals and organizations in the allopathic field.

Andrew Taylor Still passed away in Kirksville, Missouri, at the age of 89, on December 12, 1917.

*Source document: Gevitz, N. (2004). The DO’s: Osteopathic medicine in America. Baltimore, MD: The Johns Hopkins University Press.*

## Appendix C

### Module References and Resources

**Module 1:** none

**Module 2:**

US Department of Commerce. (2016). An aging world: 2015.

Brault, M.W. (2012). Americans with disabilities: 2010. *Current Population Reports*. 131(70). Washington, DC: US Department of Commerce, Economics and Statistics Administration, US Census Bureau.

Center for Disease Control and Prevention. (2016). Healthy aging data. US Department of Health and Human Services. <http://www.cdc.gov/aging/agingdata/index.html>

Michigan Office on Aging and Adult Services. (2015). 2015 AASA annual report.

Department of Economic and Social Affairs Population Division. (2001). World Assembly on Aging: 1950-2050. New York, NY: United Nations. <http://www.un.org/esa/population/publications/worldageing19502050/>

**Module 3:**

Brummel-Smith, K. (2007). Optimal aging part 1: Demographics and definitions. *Annals of Long-Term Care*.15(11), 26-28.

Clarke, T.C., Black, L., Stubbsman, B.J., Barnes, P.M., Nahin, R.L. (2015). *Trends in the use of complementary health approaches among adults in the United States, 2002-2012: National health statistics report*, (79). Hyattsville, MD: National Center for Health Statistics.

Gevitz, N. (2004). *The DO's: Osteopathic medicine in America*. Baltimore, MD: The Johns Hopkins University Press.

Monson, C.L. (2014). An overview of optimal aging.

<http://www.com.msu.edu/FCM/Geriatrics.htm>

O'Neil, K. (2004). Optimal aging manual: Your guide from experts in medicine, law, and finance. Sarasota, FL: Optimal Aging LLC.

Still, A.T. (1899). Philosophy of Osteopathy. Kirksville, MO: A.T. Still.

Still, A.T. (1908). Autobiography of A. T. Still. Kirksville, MO: A.T. Still.

#### **Module 4:**

Brummel-Smith, K. (2007). Optimal aging part 1: Demographics and definitions. *Annals of Long-Term Care*.15(11), 26-28.

Gerber, R. (2001). Vibrational medicine: The #1 handbook of subtle-energy therapies. Rochester, VT: Bear and Company.

Gerber, R. (2000). Vibrational medicine for the 21<sup>st</sup> century: A complete guide to energy healing and spiritual transformation. New York, NY: William Morrow Publishing.

Mayo Clinic. (2010). Mayo clinic book of alternative medicine, 2<sup>nd</sup> edition (updated and expanded): Integrating the best of natural therapies with conventional medicine. Birmingham, AL: Oxmoor House.

#### **Module 5:**

Brummel-Smith, K. (2007). Optimal aging part 1: Demographics and definitions. *Annals of Long-Term Care*.15(11), 26-28.

Gerber, R. (2001). Vibrational medicine: The #1 handbook of subtle-energy therapies. Rochester, VT: Bear and Company.

Gerber, R. (2000). Vibrational medicine for the 21<sup>st</sup> century: A complete guide to energy healing and spiritual transformation. New York, NY: William Morrow Publishing.

Mayo Clinic. (2010). Mayo clinic book of alternative medicine, 2<sup>nd</sup> edition (updated and expanded): Integrating the best of natural therapies with conventional medicine. Birmingham, AL: Oxmoor House.

### **Module 6:**

Brummel-Smith, K. (2007). Optimal aging part 1: Demographics and definitions. *Annals of Long-Term Care*.15(11), 26-28.

Gerber, R. (2000). Vibrational medicine for the 21<sup>st</sup> century: A complete guide to energy healing and spiritual transformation. New York, NY: William Morrow Publishing.

Hay, L.L. (2004). You can heal your life. Carlsbad, CA: Hay House Publishing.

Keilman, L. (2015). Spirituality in aging. <http://www.com.msu.edu/FCM/Geriatrics.htm>

Mayo Clinic. (2010). Mayo clinic book of alternative medicine, 2<sup>nd</sup> edition (updated and expanded): Integrating the best of natural therapies with conventional medicine. Birmingham, AL: Oxmoor House.

Newberg, A., Waldman, M.R. (2010). How god changes your brain. New York, NY: Ballantine Books.

Schulz, M.L., Hay, L.L. (2016). Heal your mind: Your prescription for wholeness through medicine, affirmations, and intuition. Carlsbad, CA: Hay House Publishing.

### **Module 7:**

Brummel-Smith, K. (2007). Optimal aging part 1: Demographics and definitions. *Annals of Long-Term Care*.15(11), 26-28.

Gerber, R. (2001). Vibrational medicine: The #1 handbook of subtle-energy therapies. Rochester, VT: Bear and Company.

Gerber, R. (2000). Vibrational medicine for the 21<sup>st</sup> century: A complete guide to energy healing and spiritual transformation. New York, NY: William Morrow Publishing.

Gerstenlauer, C.J. (n.d.). Simulated aging exercise presentation. Geriatric Educational Center of Michigan.

Mayo Clinic. (2010). Mayo clinic book of alternative medicine, 2<sup>nd</sup> edition (updated and expanded): Integrating the best of natural therapies with conventional medicine. Birmingham, AL: Oxmoor House.

Monson, C.L. (2014). An overview of optimal aging.

<http://www.com.msu.edu/FCM/Geriatics.htm>

Neff, D. Opportunities and challenges for the aging physician.

<http://www.com.msu.edu/FCM/Geriatics.htm>

Still, A.T. (1899). Philosophy of Osteopathy. Kirksville, MO: A.T. Still.

Still, A.T. (1908). Autobiography of A. T. Still. Kirksville, MO: A.T. Still.



## Appendix D

### Annotated List of Useful Websites and Resources

#### Acupuncture: An Introduction

<http://nccam.nih.gov/health/acupuncture>

U.S. Department of Health and Human Services National Institutes of Health website for consumers and health professionals on complementary and integrative health. This link specifically covers an explanation of and recent research on acupuncture.

#### Administration for Community Living

<http://www.acl.gov>

U.S. Department of Health and Human Services website for the Administration on Aging, including programs, program results, aging statistics, and key indicators of aging well-being pulled together by a federal interagency forum.

#### Aging, Consumer Information

<http://www.healthinaging.org/>

A website for consumers established and maintained by the American Geriatrics Society, covering issues in aging, such as how to find geriatric healthcare professionals, information on medications, medical care directives, and issues commonly faced by elderly caregivers.

#### American Geriatrics Society

<http://www.americangeriatrics.org/>

A website sponsored by a non-profit organization of more than 5,000 health professionals devoted to improving the health, independence, and quality of life

for all older people. The organization provides leadership to healthcare professionals, policy makers and the public through programs in patient care, research, professional and public education, and public policy.

### **American Osteopathic Association**

<https://www.osteopathic.org/>

A website sponsored by a non-profit organization of more than 100,000 osteopathic physicians advancing the distinctive philosophy of Osteopathic medicine and practicing in every specialty. The American Osteopathic Association (AOA) promotes public health, encourages scientific research, and is active in promoting public policy for wellness.

### **Benson-Henry Institute for Mind-Body Medicine**

<http://www.massgeneral.org/bhi/>

A Massachusetts General Hospital link to the Benson-Henry Institute for Mind Body Medicine, which focuses on research, teaching, and clinical applications of mind-body medicine and the integration of mind-body medicine into all areas of health, especially stress-related illnesses.

### **The Center for Mind-Body Medicine**

<http://www.cmbm.org/>

The Center for Mind-Body Medicine creates communities of hope and healing. They have an effective evidence-based program for healing population-wide psychological trauma and stress, using a variety of techniques drawn from the world's healing traditions and modern medicine. They train a critical mass of health professionals, educators, and community leaders in a mind-body medicine model of care, and then the community representatives in turn integrate the model into their communities and use it with the populations/groups/individuals they serve.

## **Complementary and Alternative Medicine**

<http://report.nih.gov/NIHfactsheets/ViewFactSheet.aspx?csid=85>

U.S. Department of Health and Human Services National Institutes of Health fact sheet providing a brief explanation of complementary and alternative medicine (CAM), and a review of research on safety and effectiveness of various modalities of CAM treatment.

## **Complementary and Alternative Medicine, Mind-Body Practices**

<https://report.nih.gov/NIHfactsheets/ViewFactSheet.aspx?csid=102&key=M#M>

U.S. Department of Health and Human Services National Institutes of Health fact sheet providing information about mind-body practices in complementary and alternative medicine.

## **Dietary Supplements: Five Things Consumers Need to Know**

<http://nccih.nih.gov/health/tips/supplements>

This NIH NCCIH fact sheet reviews five tips consumers need to know about dietary supplements.

## **Geriatric Educational Resources**

<http://www.pogoe.org/>

The Portal of Geriatrics Online Education (POGOe) is a collection of expert-contributed geriatrics educational materials for educators and learners. The goal is to promote geriatrics education. The site is funded by the Reynolds Foundation and is managed by the Icahn School of Medicine at Mount Sinai, Department of Geriatrics and Palliative Medicine, on behalf of the Association of Directors of Geriatric Academic Programs (ADGAP). The site is operated through a partnership between Icahn School of Medicine at Mount Sinai and Vanderbilt

University School of Medicine, Department of Biomedical Informatics and Division of Geriatrics.

### **Geriatric Care/Practicing Physician Education**

<http://www.gericareonline.net/tools/index.html>

Using a train-the-trainer approach and tool kits of information for patient education, this project provides community based education to primary care providers with the goal of changing their practice towards older adults. Resources are provided for primary care professionals to use.

### **Herbs at a Glance**

<http://nccih.nih.gov/health/herbsataglance.htm>

This National Institutes for Health National Center for Complementary and Integrative Health website provides a series of brief fact sheets covering basic information about more than 50 specific herbs and botanicals, including possible uses, potential side effects and cautions, and resources for more information. Fact sheets can be downloaded individually for each herb or all together as an EBook.

### **Holistic Healing**

<http://healing.about.com/od/faq/p/holistichealing.htm>

An information sheet on holistic healing as compared to complementary and alternative medicine and mind-body medicine.

### **Med Page**

<http://www.medpagetoday.com/Geriatrics/>

A website that gives brief reviews of current medical news, including a section devoted to the latest geriatric information.

## **Menopausal Symptoms and Complementary Health Practices**

<http://nccih.nih.gov/health/menopause>

As an example of the type of complementary health information provided by NIH/NCCIH, this fact sheet provides basic information about menopause, research on the efficacy and safety of complementary health practices for menopausal symptoms, and suggests sources for additional information.

## **Mercola, Joseph, DO**

<http://www.mercola.com/>

Joseph Mercola, DO, is an osteopathic physician whose objective is to provide consumers with up-to-date natural health information and resources. He has had numerous articles published in medical journals and is a New York Times best-selling author who has written several books. This website is routinely among the top 10 health sites on the Internet.

## **Michigan Office of Services to the Aging**

<http://www.michigan.gov/osa/>

The Michigan Office of Services to the Aging is the single state agency charged with implementing the Michigan State Plan on Aging, and overseeing programs and funding authorized by the federal government under the Older Americans Act of 1965. This state website provides information on the current state plan, programs, services, and resources dedicated to improving the quality of life of Michigan's aging and adult population.

## **Michigan State University, Department of Family and Community Medicine, College of Osteopathic Medicine, Division of Geriatrics**

<http://com.msu.edu/FCM/index.htm>

This website provides information about the MSU Department of Family and Community Medicine, College of Osteopathic Medicine, and the services it provides, its faculty and staff, and other information. In particular, it provides information about the FCM/IM COM Division of Geriatrics, and the 5-year HRSA grant received by the College of Osteopathic Medicine including materials developed under the auspices of that grant for geriatric education of medical professionals.

### **Mind-Body Medicine at Cancer Treatment Centers of America**

<http://www.cancercenter.com/complementary-alternative-medicine/mind-body-medicine.cfm>

The Cancer Treatment Centers of America includes mind-body medicine modalities as an integral part of their work with cancer patients and their caregivers. This link describes mind-body medicine and the complementary/alternative medicine/mind-body treatment services provided as part of the CTCA treatment program.

### **National Center for Complementary and Integrative Health**

<http://nccih.nih.gov/>

The National Center for Complementary and Integrative Health is one of the 27 Institutes in the National Institutes of Health. Formerly known as the National Center for Complementary and Alternative Medicine (NCCAM), NCCIH provides information about complementary, alternative, and integrative health modalities, practitioners, and resources. Evidence-based research is reviewed, continuing education opportunities, clinical practice guidelines, and other information is provided for both consumers and health professionals.

<http://nccam.nih.gov/health>

Health information provided by the NIH National Center for Complementary and Integrative Health.

## **National Center for Complementary and Integrative Health Clearinghouse**

<https://nccih.nih.gov/health/clearinghouse>

The Clearinghouse provides information on complementary health approaches and on NCCIH, including publications and searches of Federal databases of scientific and medical literature.

## **National Center for Complementary and Integrative Health**

<http://img.thebody.com/nccam/meditation.pdf>

This link provides a fact sheet on the use of meditation for health purposes.

## **National Institute on Health/National Institute on Aging**

<http://www.nia.nih.gov/>

The National Institute on Aging is one of 27 Institutes and Centers within the U.S. National Institutes of Health. It is responsible for leading a broad scientific understanding of aging and identifying ways to extend the healthy active years of life for all individuals. NIA is the primary Federal agency supporting and conducting Alzheimer's disease research. This website provides a link to all NIA initiatives and provides information about NIA activities and health and aging.

## **New York Times Article: Merging Spirituality and Clinical Psychology at Columbia**

<http://www.nytimes.com/2012/08/10/education/columbia-program-merges-therapy-and-spirituality.html?pagewanted=all>

This is a link to a New York Times article about a clinical psychology program at Columbia University, in which spirituality and psychotherapy are being integrated in a way seldom seen at a major research university. Other schools, such as the California Institute of Integral Studies in San Francisco, California, and Sofia University in Palo Alto, California, teach from similar perspectives, but Columbia is the first Ivy League university to develop a master's concentration in spiritual

psychology. Additional information about each program can be found at the websites for each of the schools.

### **Optimal Aging, Brummel-Smith, Kenneth, MD, Florida State University, College of Medicine**

<http://med.fsu.edu/index.cfm?page=geriatrics.lli>

A link to information about Kenneth Brummel-Smith, MD, including information on the concept of optimal aging as taught through the Florida State University, College of Medicine. The College is a leader in the practice of incorporating geriatrics information in each year of the medical school curriculum.

### **PubMed (search complementary and alternative medicine)**

<http://nccih.nih.gov/research/camonpubmed/>

NCCIH and the National Library of Medicine (NLM) have collaborated to create CAM on PubMed, a subset of NLM's PubMed. PubMed provides access to citations from the MEDLINE database and additional life science journals. It also includes links to many full-text articles at journal websites and other related web resources. Searches at this website are automatically limited to the subset on information on complementary and alternative medicine at PubMed.

### **Spinal Manipulation, Osteopathic Manipulation and Chiropractic**

<http://nccih.nih.gov/health/chiropractic>

A NIH NCCIH fact sheet on spinal manipulation, osteopathic manipulation, and chiropractic services. Information is primarily provided on chiropractic services for consumers and for health professionals, including clinical practice guidelines and scientific literature reviews. However, if one types "osteopathic manipulation" into the search feature, a lengthy list of references gives sources of information about osteopathic manipulation.



## **Tai Chi and Qi Gong**

<http://nccam.nih.gov/health/taichi>

Tai Chi and Qi Gong are centuries-old mind-body practices. They both involve the use of certain postures, gentle movements, mental focus, breathing, and relaxation. Tai Chi can also be used as a form of combat and self-defense. They both can be used for improving balance and stability, knee osteoarthritis, fibromyalgia, and other conditions.

## **Terms Related to Complementary and Alternative Medicine**

<http://nccih.nih.gov/health/providers/camterms.htm>

This NIH NCCIH fact sheet explains terms and definitions commonly used in complementary and alternative medicine.

## **Traditional Chinese Medicine (TCM)**

<http://nccih.nih.gov/health/whatiscom/chinesemed.htm>

Traditional Chinese Medicine originated in ancient China and has evolved over thousands of years. Practitioners use herbal medicines and various mind-body techniques, such as acupuncture and tai chi, to treat or prevent health problems. In the United States, Traditional Chinese Medicine is mostly used as a complementary health approach. This fact sheet provides an overview of TCM and suggests sources for additional information.

## **Yoga**

<https://nccih.nih.gov/news/press/11042015>

A 2012 National Health Survey concluded that people who practice yoga are more likely to do so for wellness reasons, rather than treat specific conditions, and tend to report better wellness and health behaviors.

<http://nccih.nih.gov/health/providers/digest/yoga-science>

NCCIH Clinical Digest is a monthly e-letter that offers evidence-based information on complementary and integrative health practices. In the October 2014 issue, yoga for health is reviewed, including a look at what the science says. In particular, research is reviewed regarding the research on yoga and its use in treating asthma, arthritis, and chronic low-back pain.

## Appendix E

### OTHER RESOURCES

Aldwin, C.M., Gilmer, D.F. (2004). Health, illness, and optimal aging. New York, NY: Springer Publishing.

Chopra, D. (1993). Ageless body, timeless mind: The quantum alternative to growing old. New York, NY: Harmony Books.

Chopra, D. (2001). Perfect health: The complete mind body guide. New York, NY: Three Rivers Press.

Chopra, D. (1989). Quantum healing: Exploring the frontiers of mind/body medicine. New York, NY: Random House Publishing.

Gerber, Richard, M.D. (1988). Vibrational medicine: New choices for healing ourselves. Rochester, VT: Bear & Company.

Hay, L.L. (1982). Heal your body: Metaphysical causations for physical illness. Carlsbad, CA: Hay House Publishing.

Myss, C. (1997). Why people don't heal, and how they can. Chicago, IL: Carolyn Myss.

Ortner, N. (2013). The tapping solution. Carlsbad, CA: Hay House Publishing.

Schachter-Shalomi, Z., Miller, R.S. (1995). From age-ing to sage-ing: A profound new vision of growing older. Los Angeles, CA: Warner Publishing.

Shapiro, D. (2002). The body mind workbook: Explaining how the mind and body work together. New York, NY: Vega Publishing.

Weil, A. (2000). Breathing: The master key to self healing. Louisville, CO: Sounds True Publishing.