CENTER FOR HEALTH SCIENCES

College Administration

Kayse M. Shrum, DO-President and Dean

Johnny Stephens, PharmD–Senior Vice President and Chief Operating Officer

Jeffrey Stroup, PharmD–Interim Provost and Vice President for Strategy, Interim Senior Associate Dean of Operations

Dennis Blankenship, DO – Interim Senior Associate Dean of Academic Affairs

Eric Polak, MBA–Vice President for Administration and Finance Anhna Vuong, MALD–Vice President for Institutional Advancement William J. Pettit, DO–Dean, OSU College of Osteopathic Medicine, Cherokee Nation

Bruce Benjamin, PhD–Vice Provost for Graduate Studies, Associate Dean for Biomedical Sciences

LeRoy Young, DO-Senior Associate Dean for Clinical Affairs

Robin Dyer, DO-Associate Dean for Academic Affairs

Christopher C. Thurman, DO-Associate Dean for Clinical Education and Simulation Medicine

Kent Smith, PhD–Associate Dean, Office for the Advancement of American Indians in Medicine and Science

Natasha Bray, DO—Associate Dean for Academic Affairs, OSU College of Osteopathic Medicine, Cherokee Nation

Jeff Hackler, JD-Assistant Dean for Enrollment Management

Jenny Alexopulos, DO–Director of Medical Education for OSU Medical Center, Medical Director for OSU Physicians

Gary L. Slick, DO-Director of Medical Education for Teaching Health Center

Campus Address and Phone

Address: 1111 West 17th St., Tulsa, OK 74107 Phone: 918.582.1972, 800.677.1972 Website: www.health.okstate.edu (http:// www.healthsciences.okstate.edu) E-mail: admissions@chs.okstate.edu

College of Osteopathic Medicine

As health care grows more sophisticated, the supply of primary care physicians will continue to be a challenge. The OSU College of Osteopathic Medicine is helping to address that challenge and to fulfill a critical need in Oklahoma, and beyond, by training physicians who are qualified to treat every member of the family and enhance the health care process by applying his or her knowledge to treat the whole person. The mission of the OSU College of Osteopathic Medicine is to educate osteopathic primary care physicians with an emphasis on serving rural and underserved Oklahoma.

The majority of graduates of the OSU College of Osteopathic Medicine practice in the primary care fields—family medicine, emergency medicine, pediatrics, internal medicine and obstetrics/gynecology. The remaining graduates do their postdoctoral training in other specialties and subspecialties—anesthesiology, neurology, psychiatry, radiology, surgery, dermatology and oncology, to name a few. Regardless of the field they pursue, our students are trained to be excellent physicians, beginning with a strong background in general osteopathic medicine.

The college was founded in 1972 in response to a physician shortage in the small towns and rural areas of Oklahoma. The college opened its doors in 1974 and graduated its first class in 1977. In 1988, the college was merged with Oklahoma State University and confirmed its mission to prepare students to be primary care physicians with emphasis in rural medicine. In 2001, the Oklahoma legislature added another designation by creating the OSU Center for Health Sciences the umbrella organization for the College of Osteopathic Medicine; and graduate programs in biomedical and forensic sciences, health care administration and athletic training.

The OSU Center for Health Sciences is located on 16 acres along the west bank of the Arkansas River with an impressive view of downtown Tulsa. Modern buildings house conference facilities, a hospital simulation center, expanded classroom space, a medical bookstore and a forensic sciences and biomedical research facility. The OSU Medical Center, located a half-mile north of campus, is the primary teaching hospital for the college. The medical center serves Tulsa and the surrounding communities, and serves as both a teaching clinic for medical students, interns and residents, and a health care resource for residents of Tulsa and the surrounding area. The medical center is a state entity operated by the Oklahoma State University Medical Authority, with management by Saint Francis Health System. The hospital provides comprehensive and specialized health care and is staffed by licensed physicians and other health care professionals who supervise students in the care of patients. The OSU combined clinic system covers a wide variety of specialties. The clinics provide essential health care to the community.

Promoting a patient-centered approach to health care, osteopathic physicians are concerned with the entire patient and traditionally have excelled in general and family health care. The doctor of osteopathic medicine is a fully-trained and licensed physician who selectively utilizes all accepted scientific modalities to maintain and restore health. Osteopathic physicians and surgeons are licensed in every state to practice all phases of medicine, and offer their patients the added dimension of health care through osteopathic manipulation, a handson technique that uses palpation and manipulative procedures of the musculoskeletal system to diagnose and treat illness.

Minimum Admission Requirements

Prior to matriculation, the applicant must have an overall grade-point average of at least 3.00 (on a 4.00 scale), a pre-professional science GPA of at least 2.75, and a minimum score of 492 on the Medical College Admissions Test (MCAT). All applicants must take the MCAT within three years prior to matriculation. The last MCAT test date accepted for each application cycle is January the year of matriculation. Under special circumstances, the College may use discretion to admit students who do not meet these minimum requirements.

At the time of entry, the applicant must have completed:

- Completion of at least three years (90 semester hours) and not less than 75 percent of the courses required for a baccalaureate degree at a regionally accredited college or university.
- Satisfactory completion of the following courses with no grade below "C" (2.0 on a 4.0 scale):
 - English, 2 semesters
 - · Biology, 2 semesters (including laboratory)
 - Physics, 2 semesters
 - General Chemistry, 2 semesters
 - Organic Chemistry, 2 semesters

- At least one upper division (3000-4000) level science course, including but not limited to:
 - Human Anatomy or Comparative Anatomy
 - Biochemistry
 - Microbiology
 - Molecular Biology
 - Histology
 - Cellular Biology
 - Embryology
 - Physiology

The annual AACOMAS application deadline is February 28. The deadline for supplemental application materials is March 30.

An on-campus interview with the Applicant Interview Committee is by invitation only. Interviews are conducted by clinical and basic science faculty members, as well as alumni. Applicants must participate in the interview to qualify for further consideration. Interview results and other data submitted will be considered when determining which applicants have demonstrated appropriate levels of scholarship, aptitude and motivation for admission to the program. Class size is limited to 165 students (in 2019).

Selection Factors

The College considers applications for admission from all qualified candidates. The Oklahoma State University Center for Health Sciences provides equal employment and/or educational opportunity on the basis of merit and without discrimination because of age, race, ethnicity, color, religion, sex, sexual orientation, genetic information, gender, gender identity or expression, national origin, disability, protected veteran status, or other protected status in any of its policies, practices, or procedures. Preference is given to Oklahoma residents. Applicants must be U.S. citizens or permanent residents of the U.S. Non-U.S. citizens must have a permanent resident visa ("green card") at the time of application in order to be considered for admission.

College Curriculum

The curriculum at the OSU College of Osteopathic Medicine places significant focus on primary care. The four-year program emphasizes the integration of biomedical sciences with clinical systems. The curriculum includes early hands-on clinical experiences with patients, patient models, and simulations. Instructional methods are student-centered and include traditional lecture, and small group and team-based learning. Problem-solving and information retrieval skills are emphasized to produce and develop skills that support lifelong learning.

The culture of the OSU College of Osteopathic Medicine encourages students to establish an academic relationship with faculty members and community-based physicians. The curriculum emphasizes integration of biomedical with clinical and behavioral sciences to permit the full comprehension of the clinician's work and promote a holistic approach to the care of patients and their families. Students receive training in all areas of medicine, with additional emphasis on osteopathic manipulative medicine.

Incorporated within the OSU-COM curriculum is a Rural Medical Track (RMT) that stresses the unique nature and characteristics of a rural practice, provides a pathway for student matriculation into a rural primary care residency, and supports residency graduates in the establishment of a practice in a rural or underserved Oklahoma location.

The first semester focuses on the foundations of biomedical and clinical sciences along with an introduction to patient care. Starting in the second semester and continuing through the end of the second year, students are introduced to a total of 11 clinical systems that systematically prepare students for addressing conditions typically seen in the primary care environment. The third and fourth years are comprised of clinical rotations, which are community-based, consisting of clerkship experiences in hospitals and clinics where students observe patient care and participate in the evaluation and treatment of patients under physician faculty supervision.

In the Clerkship Program, students are required to complete 22, four-week rotations in the core areas of family medicine, osteopathic manipulative medicine, pediatrics, internal medicine, surgery, obstetrics-gynecology, psychiatry and emergency medicine. In addition to the core rotations, students are also required to complete three rotations at affiliated teaching sites in rural communities, two of which are focused on gaining experience in a rural hospital setting. Students must also complete two primary care electives, seven general electives and one required vacation. Many rotations are completed at the OSU Medical Center in Tulsa, one of the largest osteopathic hospitals in the United States.

Furthermore, students enrolled in the Rural Medical Track Program take our mission to serve rural Oklahoma to new heights. The Rural Medical Track Program is designed to allow students to complete, whenever possible, the core rotations in rural communities. In addition to the core rotations, the Rural Medical Track students must also complete at least two sub-internships with rural residency programs, as well as two subspecialty electives.

Students graduate from the four-year program with the Doctor of Osteopathic Medicine (DO) degree. Although more than half of graduates enter primary care, graduates are prepared to enter residencies in all medical specialty fields. This training period lasts a minimum of three years with several specialties requiring up to five years of postgraduate education. To see a full list of residency programs our recent graduates have entered and residency acceptance data, along with OSU-COM's pass rate on the COMLEX-USA, please visit: https://health.okstate.edu/com/ admissions/graduates.html.

Accreditation

The college is accredited by the Commission on Osteopathic College Accreditation (COCA) of the American Osteopathic Association, the recognized accrediting agency for institutions that educate osteopathic physicians. The Oklahoma State Regents for Higher Education are empowered by the Oklahoma Constitution to prescribe standards for higher education applicable to each institution in the Oklahoma State System of Higher Education.

Financial Aid

Financing a medical education should be seriously considered. The primary responsibility for meeting your educational costs rests with the student and his or her family; however, the Office of Student Financial Aid makes every attempt to assist him or her financially.

The Office of Student Financial Aid supports the mission of the University by enabling students and families to reduce or eliminate financial barriers that might prohibit their participation in the programs offered by OSU Center for Health Sciences. The office administers need-based financial aid programs funded by federal, state, University and private sources in the form of Federal Stafford Ioan (Unsubsidized), Graduate PLUS Ioan, employment, as well as need- and merit-based scholarships. The office also administers the Federal non-need based loan programs (Unsubsidized) and provides information and support to students interested in the alternative loan options available to them.

Tuition and fees at the College of Osteopathic Medicine (for the 2017-2018 school year) totals \$25,796.60¹ per year for Oklahoma residents and \$53,298.56¹ per year for out-of-state residents. Fees vary by year for medical students and average \$2,967.

Most financial aid is renewable on an annual basis, provided there is adequate funding and the student remains eligible (enrolled in a matriculated program, in good academic standing and with continued need for need-based aid). To qualify, each student should file the Free Application for Federal Student Aid (FAFSA) by Feb. 15. Students are encouraged to continue to file after this date; however, consideration for funds will be given on a first-come basis.

The FAFSA and other required applications may be obtained by contacting:

Office of Financial Aid - OSU College of Osteopathic Medicine 1111 West 17th Street Tulsa, OK 74107-1898;

Students may apply online at www.fafsa.ed.gov/ (http://www.fafsa.gov) (School code is G11282).

¹ subject to change

Graduate Education

The Center for Health Sciences offers graduate degree programs in Biomedical Sciences, Forensic Sciences, Health Care Administration and Athletic Training.

The Biomedical Sciences Graduate Program offers PhD, MS, DO/MS and DO/PhD degree programs. These programs provide students with a foundation in biomedical sciences that is broadly applicable to many disciplines, including anatomy, biochemistry, cell biology, microbiology, pathology, pharmacology and physiology.

The Master of Science in Biomedical Sciences offers a thesis and nonthesis option, with both programs designed to be completed in two years with a minimum of 32 credit hours. The PhD program is designed to be completed in four years with a minimum of 90 credit hours. The DO/PhD program is designed to be completed in a minimum of seven years. The first two years are the basic science years of the program. The middle three years are graduate study, research and dissertation of the PhD program. The final two years are the clinical sciences years of the D0 program. The D0/MS program is designed to be completed in a minimum of five years. The first year is primarily the graduate portion of the program. The last four years consist of the medical portion of the degree, with any remaining graduate work completed during the first year of medical school and subsequent summers.

The Master of Science in Forensic Sciences requires a minimum of 39 credit hours with the thesis program typically completed in two full years. The MS/thesis program offers specialization in the areas of forensic biology/DNA, forensic pathology/death scene investigation, forensic pathology/microbiology, forensic psychology and forensic toxicology/ trace evidence. Full-time thesis students may complete first-year classes online before moving to campus, with permission of the specialization track lead. Non-thesis options in forensic science administration and forensic document examination are designed for practitioners with

related professional experience, who complete the degree online, usually over three to four years while maintaining full-time careers. This degree is designed for individuals pursuing careers in crime labs, investigative agencies or research institutions.

The Master of Science in Health Care Administration consists of 32 total hours with a creative component or thesis including six hours of general graduate level electives. The program has an option in healthcare leadership and entrepreneurship or an option in administration. The curriculum provides exposure to management concepts, processes and techniques associated with administration and entrepreneurship functions in a variety of health care organizations. This degree is ideal for those individuals working in health care who wish to move into management or executive positions; however, healthcare experience is not required. This degree offers on-site courses at OSU-Stillwater and OSU-Tulsa as well as distance learning opportunities. This degree can be completed in-class or fully online. The DO/MS program is designed to be completed in five years. The first year is the graduate portion of the program and the last four years consist of the medical portion of the degree.

The DO/MBA is an accelerated program that allows DO students to gain their MBA through the Spears School of Business in a single year. Six hours of elective credit can be shared from the DO coursework or business electives of the student's choice. The DO/MPH is an accelerated program that allows DO students to gain their M.P.H. in one calendar year, by allowing DO coursework to serve as elective coursework for the MPH degree. This 42-hour program captures 27 hours of the MPH's core coursework in the fall and spring semesters with six elective hours taken in the summer.

The Master of Athletic Training Program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Once accepted into the program, students are assigned to a Board of Certification (BOC) Certified Athletic Trainer (AT) where they are responsible to provide for the overall health care of patients over the course of their respective seasons or occupation. Clinical instruction of students is achieved through direct supervision by health care providers. The curriculum is based in the human sciences with anatomy, physiology, biomechanics, pathology, pharmacology, nutrition and psychology providing the theoretical foundation of student inquiry. Students learn how to apply these theoretical concepts while in the clinical setting learning under licensed physicians, athletic trainers, physical therapists and other allied health care professionals. This balance of theory and practical application prepares students to sit for the Board of Certification examination where upon successful completion, may earn the credentials ATC. Additional information about these programs can be found at: http://www.health.okstate.edu/com/catalog.php.

Honor and Service Organizations

The College emphasizes community service, and many students volunteer their time in giving school and athletic physicals, visiting nursing homes, working with school children and working at College-sponsored health fairs or the annual Osteopathic Scrub Run. Listed below are official student organizations.

American College of Osteopathic Emergency Physicians (ACOEP) American College of Osteopathic Family Physicians (ACOFP) American College of Osteopathic Pediatricians (ACOP) American Medical Student Association (AMSA) American Medical Women's Association (AMWA) American Osteopathic College of Physical Medicine and Rehabilitation Anesthesiology Student Interest Group (ASIG) Association of Military Osteopathic Physicians and Surgeons (AMOPS) Association of Native American Medical Students (ANAMS) Atlas Fraternity-social Biomedical Science Graduate Student Association (BSGSA) Business & Leadership in Medical Practice (BLiMP) Christian Medical Association (CMA) Club S.P.I.N.E.-fundraising for Eugene Field Elementary Forensic Science Organization (FSO) Gay & Lesbian Advocacy in Medicine (GLAM) Health Innovation, Technology, and Entrepreneurship Club (HITEC) International Federation of Medical Students' Associations (IFMSA) Oklahoma Osteopathic Obstetrics and Gynecology Student Association Pathology & Laboratory Medicine (PLM) Pros For Africa (PFA) Sigma Sigma Phi (SSP)-honor society Society for Career Opportunities and Professional Exploration (SCOPE) Student American Academy of Osteopathy (SAAO) Student American Osteopathic Academy of Orthopedics (SAOAO) Student Association Auxiliary (SAA) Student Government Association (SGA) Student Interest Group in Neurology (SIGN) Student National Medical Association (SNMA) Student Osteopathic Association for Sports Medicine (SOASM) Student Osteopathic Association of Radiology (SOAR) Student Osteopathic Association of Research Student Osteopathic Internal Medicine Association (SOIMA) Student Osteopathic Medical Association (SOMA) Student Osteopathic Physical Medicine and Rehabilitation Association Student Osteopathic Psychiatry Association (SOPA) Student Osteopathic Research Association (SORA) Student Osteopathic Rural Medicine Club (STORM) Student Osteopathic Surgical Association (SOSA) Student Political Action Committee Wilderness Medical Society (WMS)

Faculty Center for Health Sciences

President of the Center for Health Sciences and Dean of the College of Osteopathic Medicine: Kayse M. Shrum, DO

Interim Provost of the Center for Health Sciences and Senior Associate Dean of Operations: Jeffrey S. Stroup, PharmD

Interim Senior Associate Dean of Academic Affairs: Dennis Blankenship, DO

Biomedical Sciences and Graduate Studies

Bruce Benjamin, PhD–Vice Provost for Graduate Studies, Associate Dean for Biomedical Sciences

Anatomy and Cell Biology

Nedra Wilson, PhD–Associate Professor and Interim Chair

Professors: William D. Meek, PhD; Kenneth Miller, PhD; Kent S. Smith, PhD Associate Professors: Anne Weil, PhD

Assistant Professors: Holly Ballard, PhD; Paul Gignac, PhD; Haley O'Brien, PhD; Dolores Vasquez Sanroman, PhD

Athletic Training

Jennifer L. Volberding, PhD–Associate Professor and Interim Chair Associate Professors: Matthew S. O'Brien, PhD; Aric Warren, EdD

Biochemistry and Microbiology

Charles G. Sanny, PhD–Professor and Chair

Professors: Martin W. Banschbach, PhD; Franklin R. Champlin, PhD **Associate Professors:** Earl L. Blewett, PhD; Rashmi Kaul, PhD; Gerwald Köehler, PhD

Emergency Medicine

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Aaron Lane, DO-Interim Chair
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James Herrington, DO—Clinical Assistant Professor and Vice Chair Clinical Associate Professors: Mark E. Blubaugh, DO; Jennifer Eischen-Galbraith, DO; Gavin Gardner, DO; David Gearhart, DO; Michael R. Schiesel, DO

Clinical Assistant Professors: Bobby Abernathy, DO; Tyson Bryant, DO; Michael Cannon, DO; Linden Cowley, DO; Anastasia Fisher, DO; Charles Harris III, DO; Megan Johanning, DO; Mary K. Moore, DO; Kelly A. Murray, PharmD; Jonathan D. Robins, DO; Zackary Spradlin, DO; Matthew E. Stiger, DO

Family Medicine

Lora D. Cotton, DO–Professor and Director and Interim Chair Jennifer Alexopulos, DO–Professor, Medical Education Director, Medical Director

William J. Pettit, DO-Professor, Provost, Senior Associate Dean and Associate Dean for Rural Health

Clinical Professor: LeRoy Young, DO

Associate Professors: Sarah Hall, DO; Regina Lewis, DO Clinical Assistant Professors: Steffen Carey, DO; Amanda Carey, DO; Crystal M. David, DO; Amanda Gordon Green, DO; Chelsey D. Griffin, DO; Tara B. Hasenpflug, DO; Erin Kratz DO; Lana Myers, DO

Forensic Sciences

Robert W. Allen, PhD—Professor, Graduate Program Director and Chair **Professor and Director:** Jarrad R. Wagner, PhD **Associate Professor:** Ronald R. Thrasher, PhD **Assistant Professor and Director:** John J. Frucci

Health Care Administration

James Hess, EdD–Professor, Chair and Director Clinical Professors: Anil K. Kaul; Zack Barughese Assistant Professor: Barbara B. Miller

Internal Medicine

Damon L. Baker, DO-Professor, Chair and Chief Medical Officer for OSUMC

Johnny R. Stephens, PharmD–Professor, Senior Vice President and Chief Operating Officer

Gary L. Slick, DO—Professor and Medical Director of OMECO Associate Professor: Katherine Cook, DO; Mousumi Som, DO Clinical Associate Professors: Jay Johnson, DO; Matt Wilkett, DO Clinical Assistant Professors: John Carabello, DO; Justin Chronister; Stacy Chronister, DO; Christina Connel, PharmD; Sharolyn Cook, DO; Steve Kim, DO; Leonard Lacefield, DO; Madhuri Lad, DO; Kaleb Veit, DO; Daniel Wildes, Jr., DO; William Woods, DO; Shane S. Yamane, DO

Medical Education

Susan Steele, DO—Clinical Associate Professor and Chair **Professor:** Nancy Van Winkle, PhD **Clinical Professor:** Laurie Clark, DO **Clinical Associate Professor:** Carrie Gilstrap; Randall S. Reust **Clinical Assistant Professors:** Angela Farrar

Obstetrics and Gynecology

Lance Frye, MD–Clinical Professor and Chair Clinical Professor: William Po, MD Clinical Assistant Professors: Corey Babb, DO; Erin E. Brown, DO; Carlos M. Guevara, DO

Osteopathic Manipulative Medicine

Robin Dyer, DO—Professor and Chair, Associate Dean for Academic Affairs

Clinical Associate Professors: Miriam Mills, MD; Mark Thai, DO **Clinical Assistant Professors:** Stephen Barnes, DO; Leslie Ching, DO; Jennifer Wilson, DO

Pathology

Anthony Alfrey, MD–Assistant Professor and Chair Professor: Joseph Price, PhD Clinical Assistant Professor: Eric Harp, DO

Pediatrics

Amanda Foster, DO—Clinical Professor and Interim Chair Kayse M. Shrum, DO—President and Dean, Professor **Professor and Interim Associate Dean**: Rhonda L. Casey, DO **Professor:** Shawna Seagraves-Duncan, DO **Clinical Professor:** Colony S. Fuguate, DO **Clinical Associate Professors:** Travis Campbell, DO; Jeremy Jones, DO; Whitney L. Latham, DO; Heather Rector, DO **Clinical Assistant Professors:** Laura Bode, DO; Bing Phung, DO

Pharmacology and Physiology

Bruce Benjamin, PhD–Vice Provost, Associate Dean for Biomedical Sciences, Associate Professor Kathleen S. Curtis, PhD–Interim Dean Professors: Craig Stevens, PhD; David R. Wallace, PhD Associate Professors: J. Thomas Curtis, PhD; Warren E. Finn, PhD; Alexander Rouch

Psychiatry and Behavioral Sciences

Jason W. Beaman, DO—Clinical Assistant Professor and Chair **Professor and CIRCA Director**: Jennifer Hays Grudo **Clinical Associate Professor and Director**: Stephen J. Brasseux, MD **Clinical Associate Professor**: Tessa L. Chesher, DO, Aaron Pierce, DO **Clinical Assistant Professors**: Sara M. Coffey, DO; Gary Denny, Kelly J. Dunn, MD; Alicia Ford, PhD; Samuel Martin, MD; Anna Mazur, PhD; Sara Rich, PhD; David B. Ross, MD; Matt Vassar, PhD; Kimberlee Wilson, DO

Radiology

Dean Fullingim, DO-Clinical Professor and Chair Clinical Assistant Professor: Jeremy Fullingim, DO

Rural Health

Mark Woodring, DrPH—Adjunct Clinical Assistant Professor and Assistant Dean of Rural Health Gary L. Slick, DO—Professor and Medical Director of OMECO Denna Wheeler, PhD—Clinical Associate Professor, Interim Assistant to the Dean for Operation and Interim Section Chief **Clinical Assistant Professors:** Duane Koehler, DO, Assistant to the Dean; Andrea McEachern; C. Michael Ogle, DO; Amy Harrison, Director, PA Program **Assistant Professor:** Randolph D. Hubach

Surgery

Michael Thomas, MD–Clinical Assistant Professor and Chair Brian C. Diener, DO–Professor and Vice Chair Professor: Douglas C. Foster, DO Clinical Assistant Professors: Adam Bradley, DO; Hal H. Robbins, DO; Nathan Roberts, DO