# COLLEGE OF OSTEOPATHIC MEDICINE

## Administrative Officers

<table>
<thead>
<tr>
<th>Title/Department</th>
<th>Officer</th>
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</table>
| Interim Dean                                                | Shannon Ramsey Jimenez, DO  
srj033@shsu.edu ; 936.202.5227                                           |
| Associate Dean for Clinical Affairs                         | Stephen L. McKernan, DO, FAAFP, FACOFP;  
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| Associate Dean for Biomedical Sciences                      | Kevin Lord, PhD, kc1043@shsu.edu; 936.202.5219                            |
| Associate Dean for Educational Affairs                      | Courtney West, PhD,  
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| Assistant Dean for Graduate Medical Education and Designated Institutional Official | TBD                                                                      |
| Department of Molecular and Cellular Biology                | Sanjeev Choudhary, PhD, Chair,  
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| Department of Clinical Anatomy                               | Mario Loomis, MD, Chair, mxl107@shsu.edu; 936.202.5220                     |
| Department of Osteopathic Principles and Practice           | Sharon Gustowski, DO, Chair,  
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| Department of Physiology and Pharmacology                    | Diego Alvarez, MD, PhD, Chair,  
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| Department of Primary Care and Clinical Medicine            | Oluwaseun Olayi, DO, Assistant Chair  
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## About the College

The College of Osteopathic Medicine consists of three divisions, five academic units, and three offices.

- Clinical Affairs
  - Department of Primary Care and Clinical Medicine
  - Department of Osteopathic Principles and Practice
- Biomedical Sciences
  - Department of Physiology and Pharmacology
  - Department of Molecular and Cellular Biology
  - Department of Clinical Anatomy
- Educational Affairs
  - Office of Assessment, Evaluation, and Accreditation
  - Office of Academic Infrastructure and Professional Development
  - Office of Medical Student Affairs

## Mission

The mission of the Sam Houston State University (SHSU) College of Osteopathic Medicine (COM) is to prepare students for the degree of Doctor of Osteopathic Medicine with an emphasis toward primary care and rural practice, to develop culturally aware, diverse and compassionate physicians, who follow osteopathic principles, that are prepared for graduate medical education, and will serve the people of Texas with professionalism and patient-centered care.

A significant part of the mission of the COM is to increase the physician workforce in the eastern region of Texas and to increase access to primary care. The COM will accomplish this by recruiting qualified applicants from areas to which they would likely want to return and establish their practice.

Mission Creation and Revision  
Created: January 16, 2017  
Revised: March 9, 2018; July 5, 2018

## Contact Information

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Website

College of Osteopathic Medicine

Highlights

SHSU-COM has been awarded Pre-Accreditation from the Commission on Osteopathic College Accreditation (COCA).

- The SHSU College of Osteopathic Medicine is the eighth college of the university and only the third college of osteopathic medicine in the state.
- HB2867 (86R) designates the Sam Houston State University College of Osteopathic Medicine as an official Texas State Medical School.
- The state-of-the-art medical school facility is 108,000 square feet with surface parking on 7.3 acres in Conroe, Texas.
- SHSU’s history of contributing to the well-being of the state started over 139 years ago, when the university was established to respond to the need for trained teachers. At the time, state leaders recognized that education was key to improving quality of life and the subsequent prosperity of Texas.
- Today, the university is responding to another critical workforce demand, where education, again, is key to elevating the quality of life for millions of Texans. This led to the development of the College of Osteopathic College, which shares the mission of changing the medical work force in Eastern Texas by improving access to primary care, general surgery, and mental health to name a few of the critical shortages.

Doctoral Degree

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Scholarships

The SHSU-COM is developing scholarship opportunities accessed through the Scholarships4kats (https://www.shsu.edu/dept/financial-aid/aid/scholarships/) application process.

Other

SHSU-COM has programs and organizations that support students’ integration into medical school and provide networking and service opportunities for students and faculty.

Anatomy

ANAT 7801. Clinical Anatomy. 8 Hours.

Students explore integrated gross and microscopic human anatomy including a regional focus on embryological development. Laboratory cadaveric dissection, virtual microscopy, radiological imaging, and models are all utilized as learning tools. Students will apply knowledge of the anatomical sciences to understand clinical correlates.

Clinical

CLIN 7201. Wellness for Healthcare Professionals. 2 Hours.

Students examine wellness in relation to Healthcare. This clerkship is accomplished online with weekly video meetings with faculty. The student is expected to learn methods to improve and maintain physical, mental, spiritual, financial, and institutional wellness for themselves, their patients and their teams.

CLIN 7271. Clinical Hematology. 2 Hours.

This course is a 2-week elective clerkship providing the student with the opportunity to gain experience in clinical hematology. The clinical experience will emphasize the diagnosis and management of various hematologic disorders. Participating students will have the opportunity to reinforce clinical skills which include completing an accurate patient history and physical exam. They will also gain understanding on the complex decision making required in caring for patients with hematologic disorders.

CLIN 7401. General Surgery Clerkship. 4 Hours.

This clinical clerkship provides the student with the opportunity to gain experience in General Surgery. Students are assigned to a hospital for their 3rd year core rotations, and this clinical clerkship is accomplished at the assigned facility. The student is expected to learn the diagnosis and treatment of surgical patients, including pre-operative evaluation, intra-operative and post-operative care, post hospital care, interprofessional team care and office care. Credits: 4.

Prerequisite: Successful completion of all coursework in years 1 & 2, Passing grade on COMLEX Level 1.
This clinical clerkship provides the student with the opportunity to gain experience in Adult Inpatient Medicine. Students complete the four week block in each of the third and fourth years and are assigned to a hospital for their third year core rotations, and this course is accomplished at the assigned facility. The student is expected to learn the diagnosis and treatment of adult patients on the inpatient medicine service, including admission criteria, interprofessional team based care, consultations, bedside diagnosis and management, pre-operative evaluation, post-operative medical management, discharge criteria and procedures and post hospital care. Credits: 4.  
Prerequisite: Successful completion of all coursework in years 1 & 2, passing grade on COMLEX Level 1.

**CLIN 7403. Emergency Medicine Clerkship. 4 Hours.**  
This clinical clerkship provides the student with the opportunity to gain experience in Emergency Medicine. Students are assigned to a hospital for their third year core rotations, and this clinical clerkship is accomplished at the assigned facility. The student is expected to learn the diagnosis and treatment of pediatrics and adult patients upon presentation to the emergency department including admission, discharge and transfer criteria, interprofessional team based care, consultations, and bedside diagnosis and management to include trauma care and acute cardiac and respiratory care. Credits: 4.  
Prerequisite: Successful completion of all coursework in years 1 & 2, passing grade on COMLEX Level 1.

**CLIN 7404. Psychiatry Clerkship. 4 Hours.**  
This clinical clerkship provides the student with the opportunity to gain experience in psychiatry and mental health. Students are assigned to a hospital for their third year core rotations and this clinical clerkship will be accomplished as part of the core rotations, but may or may not be at the assigned facility, depending on services provided. The student is expected to learn the diagnosis and treatment of patients in a behavioral health setting. Credits: 4.  
Prerequisite: Successful completion of all coursework in years 1 & 2, passing grade on COMLEX Level 1.

**CLIN 7405. Family Medicine Clerkship. 4 Hours.**  
This clinical clerkship provides the student with the opportunity to gain experience in Family Medicine. Students are assigned to a hospital for their third year core rotations, and this clinical clerkship is accomplished as part of the core rotations, but may occur in the office or hospital setting, or a combination, depending on services provided by the attending physician. The student is expected to learn the diagnosis and treatment of patients in the family medicine office setting and may follow the family physician to the other sites of care based on their practice. Credits: 4.  
Prerequisite: Successful completion of all coursework in years 1 & 2, passing grade on COMLEX Level 1.

**CLIN 7406. Pediatrics Clerkship. 4 Hours.**  
This clinical clerkship provides the student with the opportunity to gain experience in the care of children. Students are assigned to a hospital for their third year core rotations, and this clinical clerkship is accomplished as part of the core rotations, but may occur in the office or hospital setting, or a combination, depending on services provided by the attending physician. The student is expected to learn the diagnosis and treatment of children and may follow the physician to the various sites of care based on their practice. Credits: 4.  
Prerequisite: Successful completion of all coursework in years 1 & 2, passing grade on COMLEX Level 1.

**CLIN 7407. Women's Health Clerkship. 4 Hours.**  
Students complete a four week block in each of the third and fourth years. It provides the student with the opportunity to gain experience in the care of women. Students are assigned to a hospital for their third year core rotations, and the third year block is accomplished as part of the core rotations and may include office in addition to hospital practice, depending on structure of the rotation and services provided by the attending physician. The fourth year block may address aspects of women's health that do not include obstetrics and/or gynecology. The student is expected to gain experience in prenatal care, labor and delivery, gynecology and breast health, and the unique aspects of the care of women in areas such as cardiovascular health, osteoporosis, and breast cancer. Credits: 4.  
Prerequisite: Successful completion of all coursework in years 1 & 2, passing grade on COMLEX Level 1.

**CLIN 7408. Rural & Underserved Medicine Clerkship. 4 Hours.**  
This clinical clerkship provides the student with the opportunity to gain experience in the care of rural and underserved populations in a variety of settings. Students are assigned to a hospital for their third year core rotations, and this clinical clerkship is accomplished outside of the main assigned hospital. Aspects of this rotation may occur in a rural or critical access hospital, a nursing home, a rural clinic or a community health center in a rural or urban setting. The student is expected to experience the social and diagnostic challenges associated with caring for populations with limited access to health services due to geography, insurance status and/or health access as well as the satisfaction of making a difference in health disparities. Credits: 4.  
Prerequisite: Successful completion of all coursework in years 1 & 2, passing grade on COMLEX Level 1.

**CLIN 7410. Elective Clinical Clerkship. 4 Hours.**  
This course is a clinical clerkship providing the student with the opportunity to gain experience in any specialty with approval. Students are required to do one 4-weeks block in their third year and seven 4-week blocks in their fourth year. The clinical clerkships is accomplished at the assigned facility in the third year and an affiliated facility in fourth year. The student is expected to learn the diagnosis and treatment of patients appropriate for the selected specialty, including interprofessional team based care, outpatient care, hospital care, surgical care, post hospital care and office care, as appropriate for the specialty. Credits: 4.  
Prerequisite: Successful completion of all coursework in years 1 & 2, passing grade on COMLEX Step 1.
Clinical Clerkships

**CLIN 7414. Medicine Selective Clerkship. 4 Hours.**
This clinical clerkship provides the student with the opportunity to select an area of medicine from a selected group of rotations in medicine. This rotation must be completed within the assigned facility in year three and an affiliated facility in year four. The list of choices for this rotation are: General Internal Medicine, Pediatrics, Family Medicine, Geriatrics, Emergency Medicine, Hospitalist Medicine, Intensive Care, Pulmonology, Cardiology, Gastroenterology, Neurology, Adolescent Medicine, Rural Health, Primary Care Sports Medicine, Public Health, Alcohol and Substance abuse, Adult and Child and Adolescent Psychiatry, Neonatology, Pediatric ICU, and subspecialty pediatrics. Credits: 4.
**Prerequisite:** Successful completion of all coursework in years 1 & 2, Passing grade on COMLEX 1.

**CLIN 7415. Surgery Selective Clerkship. 4 Hours.**
This course provides the student with experience in subspecialty surgery. Students are required to take a 4 week Surgery Selective in each of their third and fourth years, and this clinical clerkship is accomplished at the assigned facility in the third year and an affiliated facility in the fourth year. The student is expected to learn the diagnosis and treatment of surgical patients appropriate for the selected specialty, including pre-operative evaluation, intra-operative and post operative care, post hospital care and office care, as appropriate. Credits: 4.
**Prerequisite:** Successful completion of all coursework in years one and two, successful completion of General Surgery rotation, Passing grade on COMLEX Step 1.

**CLIN 7451. Academic Medicine. 4 Hours.**
This course is an elective clerkship providing the student with the opportunity to gain experience in Academic Medicine. This is a 4-week rotation. This clerkship is accomplished at SHSU-COM or online. The student is expected to analyze and practice the fundamentals of academic medicine as outlined in the syllabus.

**CLIN 7452. Leadership in Medicine. 4 Hours.**
Students will gain experience in leadership in medicine. Students will analyze leadership theory and practice leadership skills specific to medicine, medical education, and public health. The course will end with the students outlining their personal and professional missions and creating a plan to develop leadership skills throughout their careers.

**CLIN 7453. Introduction to Spanish for Medical Students. 4 Hours.**
This course is a 4-week elective providing the student with the opportunity to gain experience in Spanish for Medical Professionals. This elective is offered online. Students apply medical terms, Spanish language foundations, and gain Hispanic cultural knowledge. This rotation integrates medical topics with general Spanish language and uses research validated pedagogy to facilitate learning.

**CLIN 7457. Online Radiology. 4 Hours.**
This independent study elective utilizes a significant amount of online module learning to help students develop a basic understanding of the principles and applications of medical imaging. The course focuses on a patient-centered approach to imaging and helps students build clinical problem-solving skills by utilizing the American College of Radiology Appropriateness criteria.

**CLIN 7460. Research in Medicine. 4 Hours.**
This course is a 4-week elective block providing the student with the opportunity to enhance research knowledge in their chosen area of study. This elective is accomplished through the COM in coordination with faculty. Participating students will enhance previously acquired knowledge and skill, gather and analyze data, and formulate a written report and disseminate their findings.

**CLIN 7461. Culinary Medicine. 4 Hours.**
This course is an elective clerkship providing the student with the opportunity to gain experience in Culinary Medicine. The working goals are to provide medical students with a basic understanding of the culinary skills required to achieve a patient’s dietary and/or nutritional goals. The student is expected to learn how to use food as medicine and decrease it as a risk factor for disease. The course is a hybrid course that will be offered in person and online.

**CLIN 7470. Sports Medicine Elective Clerkship. 4 Hours.**
This clinical clerkship provides the student with the opportunity to gain experience in Sports Medicine and equip the medical student with a foundation in Sports Medicine to support their maturing clinical judgment and knowledge. This clinical clerkship is accomplished as 4-week elective. The student is expected to learn basic exam findings, diagnoses, and treatment plans of patients in the outpatient setting and may accompany the Sports Medicine physician to the other sites of care based on their practice.

**CLIN 7471. Four Week Clinical Hematology Elective. 4 Hours.**
This course is a 4-week elective clerkship providing the student with the opportunity to gain experience in clinical hematology. The clinical experience will emphasize the diagnosis and management of various hematologic disorders. Participating students will have the opportunity to reinforce clinical skills which include complete and accurate patient history and physical exam. They will also gain understanding on the complex decision making required in caring for patients with hematologic disorders.

**Clinical Medicine**

**CMED 7201. Clinical Medicine 1. 2 Hours.**
The student explores foundational skills and knowledge pertinent to becoming a physician. Topics may include ethics, professionalism, self-care, patient centered, and physician centered history taking. A basic physical examination is learned as well. The pre-clinical student have an opportunity to interact with other health care professions students to learn the importance of teamwork and inter-professional collaboration. OMM1 is paired and integrated alongside this course.
CMED 7304. Clinical Medicine 4. 3 Hours.
The student integrates knowledge and techniques already attained to develop a holistic approach to medicine. Major topics may include cultural diversity, population health, health outcomes, and EBM (evidence based medicine). Simulation and clinical skills focus on the life cycle (pediatrics, women's health, and geriatrics). More advanced simulations and inter-professional events occur. Application of medical decision-making and the performance and documentation of a full history and physical continue to be a focus and requirement for attainment of these skills. This course shares focus and integrated activities with OMM4.

CMED 7402. Clinical Medicine 2. 4 Hours.
The student continues the foundational work of becoming a physician with topics that include ethics, professionalism, and self-care with a particular focus given to the mind, behavioral health, and neurologic system. The student physician begins applying medical decision-making, working in collaborative care teams, and the role of the physician in society through simulation and standardized patient exercises. Use of physical examination to identify abnormal cardiopulmonary findings is emphasized. OMM2 shares an integrated focus.

CMED 7403. Clinical Medicine 3. 4 Hours.
The student develops more advanced skills with further concentration on ethics, professionalism, and self-care with a particular focus on EBM (evidence based medicine) and population health. The abdomen and pelvis physical examinations are learned in detail. A complete new patient history and physical can now be completed and documented. Simulations continue to include collaborative events with other professional students and expands experience in common physician skills, such as suturing and resuscitation tube placements. This course is taught concurrently and aligns with OMM3.

Medical Systems

MEDS 7318. Clinical Clerkship Preparation. 3 Hours.
This course provides the student with the opportunity to review salient principles and procedures essential for the success at the start of clinical rotations. The course reviews the interpretation of electrocardiograms, imaging studies, and laboratory data, as well as OSCE’s, procedures in the simulation lab and osteopathic principles. Students are expected to be able to participate in the diagnosis and treatment of patients upon their arrival on a clinical service in their clerkships, and this course serves to ground them in basic medical knowledge and processes. Credits: 3
Prerequisite: Successful completion of all coursework in years 1 & 2, passing grade on COMLEX Level 1.

MEDS 7320. Systems Integration. 3 Hours.
Students integrate and apply biomedical and clinical concepts previously presented throughout the first two years of the undergraduate osteopathic medical curriculum. Mastery of foundational biomedical and clinical concepts will be assessed. Based upon personal strengths and opportunities, students develop a personalized study plan in preparation for successful completion of the COMLEX-USA Level 1 examination which is required for continuation in the curriculum.

MEDS 7405. Hematopoietic System. 4 Hours.
Students analyze the physiology, embryogenesis, and diseases of the blood. Specific emphasis is on disease states and how these reveal basic system characteristics useful in diagnosis and treatment.

MEDS 7504. Skin & Skeletal Muscle. 5 Hours.
Students investigate normal and abnormal structure and function of the integumentary, musculoskeletal, and motor systems. These systems are studied at the cellular, tissue, and organ system levels, including normal structure and function as well as states of disease and dysfunction.

MEDS 7602. Neuroscience & Behavior. 6 Hours.
Students explore functional anatomy and physiology of the nervous system in both health and disease, learning to use the neurologic examination, imaging techniques, and biochemical markers, to objectively assess the nervous system. Students learn the signs, symptoms, and consequences of nervous system pathologies resulting from trauma, ischemia, stroke, infection, toxins, autoimmune, and genetic conditions. Students are introduced to an overview of mental health issues, including developmental disorders, adaptive and maladaptive behaviors, mood disorders, stress-induced behavior, fear and anxiety disorders, substance abuse, somatoform disorders, and psychoses. Students also examine ethical, legal, and social aspects related to neuroscience and behavioral pathologies. In order to facilitate cognitive integration of basic and clinical sciences, this course is team-taught by clinicians and basic scientists.

MEDS 7603. Immune System & HEENT. 6 Hours.
Students are introduced to the principles of trauma, inflammatory disorders, infections, and cancers associated with HEENT as it relates to the immune system. Students learn to apply the basic concepts of immunology in normal and disease states. Topics, such as immune responses to infections, immune deficiencies, hypersensitivity, tumor and transplantation rejection, are covered in detail. In this course, the HEENT and immune systems are integrated in case-based interactive instruction. Students also apply immunology to diagnose, prevent, and treat infections, cancers, and immunological diseases.

MEDS 7605. Hematopoietic & Renal Systems. 6 Hours.
Students integrate the functional anatomy and physiology of the renal and hematopoietic systems. Students assess and interpret biochemical markers, signs, and symptoms of renal and hematopoietic pathologies. Students design comprehensive pharmacologic and non-pharmacologic treatment plans and develop an understanding of the ethical, legal, and social aspects related to disease treatment, including dialysis and transplant.
MEDS 7606. CV & Respiratory Systems. 6 Hours.
Students integrate concepts related to the cardiovascular and respiratory systems in health and disease. Students analyze environmental and socio-cultural aspects of the region influencing the normal function of the systems. Topics may include morphological sciences (anatomy, histology, and embryology), physiology, pathology, and contemporary therapeutic approaches. Students integrate basic and clinical sciences in the context of commonly presented clinical scenarios.

MEDS 7607. GI System & Nutrition. 6 Hours.
Students examine the structure and function of the gastrointestinal (GI) and hepatobiliary systems in both health and disease. Basic tenets of nutrition and the impact of GI dysfunction on nutritional status are discussed. Students evaluate the impact of food and diet, including micro and macronutrients, on health and disease prevention. Topics may include therapeutic diets and nutrition for specific disorders as well as tube feeding, IV alimentation, medical and surgical interventions.

MEDS 7608. Endocrine Reproductive & Urinary Systems. 6 Hours.
Students integrate the core biomedical sciences in the identification, differentiation, diagnosis, and management of the normal and abnormal states of the endocrine, reproductive, and genitourinary systems. Students explore the role of hormones and their impact during pregnancy, organ development, organ function, and on metabolism, including discussions relevant to historical and current medical and surgical interventions for localized and systemic diseases for these systems.

MEDS 7609. Lifecycle. 6 Hours.
Students explore topics throughout the lifespan from pediatrics to geriatrics. Discussion includes normal growth and development as well as illness and disease. Basic science underpinnings are applied to divergent clinical manifestations and care at various stages of the lifecycle.

Osteopathic Medicine

OSTM 7233. 3rd and 4th Year Longitudinal OMM Clerkship. 2 Hours.
Students apply the knowledge and skills learned in the Osteopathic Manipulative Medicine Courses 1-4 by performing osteopathic examinations and manipulative techniques in patient care settings. Students continue to build their skills in osteopathic diagnosis and treatment through online didactic sessions and hands-on practice in clinical situations.

OSTM 7301. Osteopathic Manipulative Medicine 1. 3 Hours.
Students are introduced to the principles and practices unique osteopathic medicine, including osteopathic examination and techniques. Students develop the contextual framework and basic skills necessary for providing osteopathic patient care. Students also critically appraise osteopathic history and philosophy, thereby beginning professional identity formation as an osteopathic physician.

OSTM 7302. Osteopathic Manipulative Medicine 2. 3 Hours.
Students continue their exploration of osteopathic principles and practices as they apply to various clinical topics. Students learn new osteopathic exams and techniques, and receive reinforcement of previously learned ones. Osteopathic concepts of mind-body medicine are investigated.
Prerequisite: OSTM 7301.

OSTM 7303. Osteopathic Manipulative Medicine 3. 3 Hours.
Students continue their exploration of osteopathic principles and practices as they apply to the nervous, immune, head/eyes/ears/nose/throat and musculoskeletal systems. Students learn new osteopathic exams and techniques, and receive reinforcement of previously learned ones. Osteopathic concepts of mind-body medicine are investigated.
Prerequisite: Prerequisite OSTM 7302.

OSTM 7304. Osteopathic Manipulative Medicine 4. 3 Hours.
Students continue their exploration of osteopathic principles and practices as they apply to various clinical topics and patient populations. Students revisit osteopathic philosophy from a whole-patient perspective. Students have an opportunity to consolidate materials and skills from the previous three OMM courses and prepare for national examinations.
Prerequisite: OSTM 7303.

Scientific Methods of Medicine

SFOM 7801. Scientific Foundations. 8 Hours.
Students integrate the foundational science principles required for subsequent integrated systems courses, including microbiology, physiology, pharmacology, genetics, biochemistry, pathology, and molecular biology. Students apply critical thinking skills of the sciences using case-based scenarios.