



KCU-COM

2024 RESEARCH & SCHOLARLY ACTIVITY PLAN



KCU-COM MISSION AND VISION

MISSION STATEMENT

The College of Osteopathic Medicine (COM) prepares students to become highly competent, caring and compassionate osteopathic physicians who demonstrate the highest level of professionalism, ethics and sensitivity to the diverse personal and cultural contexts in which care is delivered. We are committed to the service of humanity and the advancement of knowledge through a collaborative environment that provides distinctive osteopathic clinical training and fosters excellence in education, research and scholarly activity, and lifelong learning.

VISION STATEMENT

The College of Osteopathic Medicine is recognized as a leader in osteopathic medical education and health care by exceeding standards of academic and clinical achievement.

INTRODUCTION

The Kansas City University of Medicine and Biosciences (KCU) campuses house a private, post-baccalaureate, not-for-profit institution of higher education. Founded in 1916, KCU College of Osteopathic Medicine (KCU-COM) is one of the oldest medical schools in the United States, and is the oldest in Kansas City, Missouri.

KCU-COM regularly conducts strategic planning to maintain and advance its research and scholarly activities. Current planning as outlined in the KCU Strategic Plan is intended to assure that KCU-COM provides the necessary resources and support needed to advance knowledge through research and scholarly contributions in the basic biomedical sciences, clinical medicine, and osteopathic principles and practice.

“...a collaborative environment that provides distinctive osteopathic clinical training and fosters excellence in education, research and scholarly activity, and lifelong learning.”

KCU-COM RESEARCH INFRASTRUCTURE

The Office of Research and Sponsored Programs (ORSP) provides pre- and post-award support for research grants as well as compliance oversight by the KCU Coordinator of Research Compliance. The compliance coordinator is charged with promoting and supporting ethical research at KCU. Mechanisms devoted to increase the practice and quality of ethical research include education and training via on-line modules, small-group presentations, and one-on-one contacts. Some of this training is mandatory, must be completed prior to beginning the research and must be updated annually. In particular, all investigators and personnel participating in human subjects or animal research are required to complete the appropriate basic education program developed by the Collaborative Institutional Training Initiative (CITI). The ORSP provides a fully functioning and accredited Institutional Review Board (IRB) as well as an Institutional Animal Care and Use Committee (IACUC). Members of these committees must complete mandatory CITI training. In addition, committee members must also participate in ongoing training during committee meetings. KCU has a fully operational animal laboratory facility located on campus, and has a PHS Office of Laboratory Animal Welfare Assurance. The ORSP is also responsible for the Conflict of Interest program which assures and monitors investigator compliance with institutional policy on financial conflict of interest.

KCU operates a Biological Safety Program and has an Institutional Biosafety Committee (IBC) to review all research activities involving recombinant DNA or the deliberate infection of experimental animals,

as required by the ‘NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules’ and by University policy. A mandatory, web-based Biosafety Training Program for both investigators and their laboratory personnel is required. Approved programs are subject to annual continuing review, and all laboratories of IBC-approved programs are inspected by a KCU biological safety officer (BSO). IBC committee members must also participate in mandatory training modules.

While students are highly encouraged to participate in research, they are not permitted to act as a principal investigator (PI). Instead, they must partner with a faculty member or preceptor who takes on the PI role. As active members of the research team, students must complete the associated CITI training and provide the research compliance coordinator with documentation prior to beginning work on the research project. Furthermore, KCU requires all students who are interested in engaging in research to apply through the Office of Research and Sponsored Programs. This way, student-researchers are provided with an additional layer of oversight and support, in conjunction with their faculty/preceptor PI.

KCU-COM maintains high levels of support in order to sustain and advance faculty/staff research and scholarly activities, to improve the research culture within KCU-COM, and to promote/facilitate student participation in research and scholarly activities. KCU leadership is committed to providing resources at the college and university level to support its research infrastructure.



**EXECUTIVE VICE-PRESIDENT
OF ACADEMIC, RESEARCH &
STUDENT AFFAIRS**

OFFICE OF THE PROVOST

The executive vice president of Academic, Research & Student Affairs ensures that academic, medical affairs and research activities align with the mission of the University’s colleges and meet compliance, accreditation and regulatory body standards. Additionally, the Office maintains oversight for the fiscal management of the academic, medical affairs and research budgets.

**VICE PROVOST OF RESEARCH
AND SCHOLARSHIP**

OFFICE OF THE PROVOST

The vice provost of Research and Scholarship serves as the provost’s chief advisor and representative in matters related to developing and implementing a strategic research program for the University. The vice provost has responsibility for providing innovative, collaborative and strategic leadership for the planning, development, implementation, maintenance and monitoring of strategic research initiatives, enhancing and achieving research goals, along with the direct management of research support personnel.

**SENIOR ASSOCIATE DEAN OF ACADEMIC
AFFAIRS, RESEARCH AND SCHOLARSHIP**

The senior associate dean of Academic Affairs, Research and Scholarship provides primary leadership and administrative oversight for all academic program offerings for attainment of the professional degree of Doctor of Osteopathic Medicine (DO) at the COM, including development and implementation of innovative academic, clinical and scholarly educational programs that include student research training and engagement. The senior associate dean supports appropriate research infrastructure and serves as a liaison with KCU research leadership, research-related committees, and the Office of Sponsored Research. This position also engages faculty in developing research opportunities, research processes and policies, and provides research training as well as oversight and approvals for student research activities.

**DIRECTOR OF SCHOLARLY ACTIVITY
AND FACULTY DEVELOPMENT**

OFFICE OF THE PROVOST

The director of Scholarly Activity and Faculty Development (DSAFD) chairs the Faculty Development Committee. Together with the committee, the DSAFD assesses KCU faculty development needs annually, including research development, and uses this assessment data to drive selection of development topics, delivery modality, and optimal days/times for delivery. The DSAFD also collects assessment data from faculty development offerings and, in collaboration with the committee, uses this data to drive decision-making for future development. In addition to development needs assessment, delivery, and outcome assessment, the DSAFD provides research education and mentorship to KCU faculty.

**SCHOLARLY ACTIVITY COORDINATOR –
GRADUATE MEDICAL EDUCATION (GME)**

The GME Scholarly Activity Coordinator (SAC) oversees research education, publications and scholarly activity for residents/fellows and GME faculty for the benefit of the COM GME Consortium programs. The SAC, in conjunction with the Designated Institutional Official (DIO), seeks to expand research resources by developing collaborative opportunities among consortium members and COM students. The SAC provides Institutional Review Board (IRB) education, Quality Improvement and Patient Safety lectures, and statistical support. The SAC, in concert with the Quality Improvement and Patient Safety Education Coordinator, conducts and oversees the Resident/Fellow Research and Quality Improvement curriculum.

START-UP FUNDING

Faculty start-up funding to support research is available through the Office of the Provost and within the COM. Often determined at the time of hire, the University supports initial start-up funds and additionally provides opportunities to apply for internal funding for pilot projects to promote the development of new projects. Internal grants typically range from \$5,000 to \$30,000, depending on the individual researcher’s request. These funds are also used to jump-start new faculty research projects. The COM principally dedicates resources to promote new scholarly activity for research-dominant faculty (> 60% time spent in research) in addition to allocating resources to new faculty to support growth of the research infrastructure across the University.

SCIENCE FRIDAY TALKS LECTURE SERIES

KCU-COM hosts a lecture series (Science Friday Talks) that invites regional and national speakers, and also includes opportunities for faculty from all KCU colleges (College of Osteopathic Medicine, College of Dental Medicine, and College of Biosciences) to showcase active research programs. The series delivers updated and informative research protocols, procedures and opportunities to faculty and students throughout the year. This series is a collaborative effort of the KCU Research Committee and all colleges of the University with the goal to share research interests and highlight collaborative studies. Three key objectives are: 1) engage students with researchers by listening to presentations followed by Q&A during academic sessions; 2) encourage KCU faculty participation in the lectures presented during the academic sessions with students; and 3) connect faculty and students with external research faculty and other scholars.

In addition, KCU-COM research is highlighted regularly via the KCU intranet, allowing employee and student engagement and on the KCU external website for the benefit of alumni, prospective students and other interested individuals.

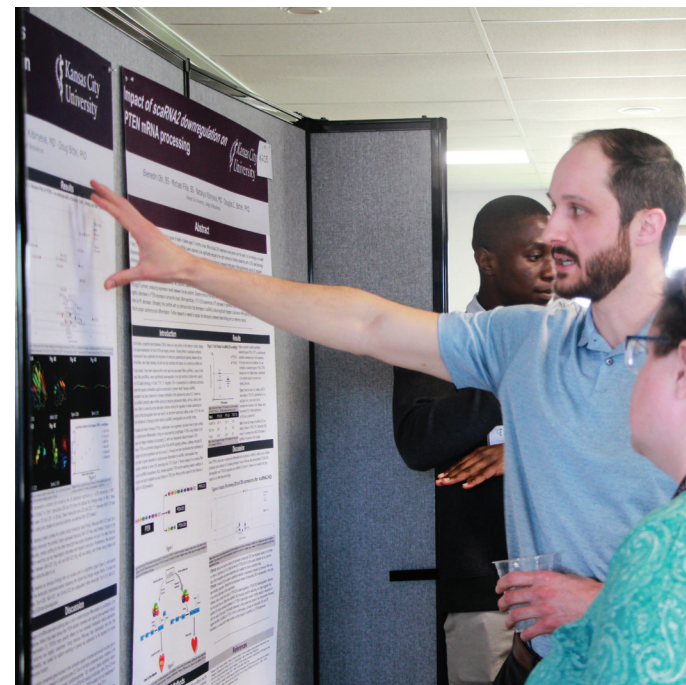
MSSU-KCU Research Consortium (MKRC) Student-led Journal Club & Case Study Seminar Series is a forum for KCU-COM students to present journal articles of interest and case reports encountered during second- and third-year clinical rotations. These presentations are presented live to KCU faculty and students and are recorded. A link is provided and added to their respective CV's to showcase presentation skills in clinical endeavors through the journal article or case study of their choice.

Many KCU student-led organizations provide opportunities for students to present their scholarly work and host outside speakers.

KCU ANNUAL RESEARCH WEEK SYMPOSIUM

KCU has a long tradition of showcasing faculty and student research and scholarly activity through the annual KCU Research Week Symposium. Originally a one-day forum, the symposium has developed into a week-long event and serves as a venue for all faculty and students to present their scholarly activity (oral presentations, posters, and projects) and learn from national and international experts delivering invited lectures and discussions.

With increasing importance placed on student research prior to and during residency, the Research Week Symposium is an opportunity for students and residents to present their work and gain first-hand experience in a professional scientific meeting. A distinct student benefit of attending the symposium is the opportunity to learn more about research at KCU and establish relationships with others conducting research aligned with their personal interests.



KCU-COM RESEARCH STRATEGIES

Strategic planning for research and scholarly activity at KCU-COM is aligned with the broader University goals established during the Strategic Plan development in 2022, setting both short-term and long-term strategic goals related to learning and discovery. On average, KCU commits roughly three percent of the total annual budget to research and scholarly activity and plans to continue to do so. The current faculty distribution indicates approximately 80% of the KCU faculty are within the COM, with the appropriate budget support allocated to the COM's scholarly initiatives.

KCU-COM STRATEGIC PLAN

The COM strategic plan is strongly aligned with the University Strategic plan and the KCU-COM Strategic Plan 2022-2027 and outlines five areas of engagement.

GOAL 1: Redefining Health Education and Student Success

GOAL 2: Mission-Relevant Research

GOAL 3: Community-Focused Service

GOAL 4: Institutional Spirit

GOAL 5: Responsible Stewardship

Goal 2 Mission-Relevant Research

- 1. Strategy: Contribute to the University initiative of a Center of Excellence for Population Health and Health Equity (with academic, research and service elements).**
 - Task: Recruit leadership, staff and faculty to impact the health and well-being of the urban and rural communities we serve.
 - Task: Partner with community-based organizations to improve measurable health outcomes.
- 2. Strategy: Develop a COM research strategy that enhances our academic programs.**
 - Task: Hire a senior associate dean for Academic Affairs and Research.
 - Task: Expand external research partnerships and increase extramural funding that enhances research and scholarship.
 - Task: Coordinate research to connect projects and programs interprofessionally throughout the University.
 - Task: Encourage and expand student participation in scholarly activities, including the annual KCU Research Week Symposium.

COMMITTEES

The following committees provide logistical support, recommendations and regulatory oversight to the University's research initiatives, advancing KCU-COM research and scholarly activities while ensuring strict adherence to policies, regulations and standards. The purpose and responsibilities of these committees are:



RESEARCH COMMITTEE

PURPOSE AND RESPONSIBILITIES:

- + Manage and provide guidance regarding Research Week Symposium.
- + Review and provide recommendations to administration regarding funding of intramural grant applications.
- + Manage and provide guidance regarding Student Summer Research Fellowship program.
- + Provide guidance regarding College of Biosciences (COB) Research Track program.
- + Make recommendations to administration regarding policy and procedures related to research.
- + Make recommendations to administration regarding investment in research, strategic planning and develop metrics for measuring outcomes.
- + Receive periodic reports from the Division of Research related to intramural and extramural funding and other relevant data.
- + Review and make recommendations regarding faculty research activity and development plan (grants in process, collaborators, etc.).

INSTITUTIONAL ANIMAL CARE AND USE COMMITTEE (IACUC)

PURPOSE AND RESPONSIBILITIES:

- + Develop and recommend policies and procedures to ensure adherence with Federal Standards of the Animal Welfare Act governing the humane handling, care, treatment and transportation of animals.
- + Review policies and programs and inspect facilities at least annually when center is inactive; if there are active animal studies, meet at least every six months, review all protocols involving the use of animals.
- + Review training of all personnel working with animals and review/investigate compliance with the Animal Welfare Act and the Guide for the Care and Use of Laboratory Animals.
- + Develop policies to support investigators conducting animal research to maintain professional standards for responsible discovery.

INSTITUTIONAL BIO-SAFETY COMMITTEE (IBC)

PURPOSE AND RESPONSIBILITIES:

- + Oversee adherence to 'NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules' and carry out all required functions.
- + Ensure all activities involving biohazardous materials are conducted in compliance with federal, state and local regulations and applicable University policies.
- + Assist and advise the KCU community on incorporating good biological safety practices into all activities involving biohazardous materials.
- + Reduce the risk of potential biohazardous threats to the KCU community, the public and the environment.
- + Review and approve practices and procedures regarding research and other activities involving biohazardous materials and chemical hazards.
- + The above responsibilities include, but are not limited to, specific practices for constructing and handling:
 - + *Recombinant DNA and synthetic nucleic acid molecules (this includes human gene transfer studies)*
 - + *Infectious agents*
 - + *Biological toxins*
 - + *Human-derived tissues, fluids, cells*
 - + *Animal-derived tissues, fluids, cells*

INSTITUTIONAL REVIEW/PRIVACY BOARD

PURPOSE AND RESPONSIBILITIES:

- + Review, approve and monitor investigational studies involving human subjects in accordance with regulations established by OHRP, Food and Drug Administration (FDA) and Department of Health and Human Services (DHHS).
- + Ensure the privacy, integrity and security of health information as it pertains to research.
- + Systematically review and approve research proposals that use any personal health information (PHI).
- + Ensure the responsible acquisition of research and knowledge.

"...advancing KCU-COM research and scholarly activities while ensuring strict adherence to policies, regulations and standards."



RESEARCH FACILITIES

DYBEDAL

As a continued commitment to research, KCU opened the 45,000-square foot Dybedal Center for Research (DCR) on the Kansas City campus in 2004. The DCR is dedicated to state-of-the-art biomedical research with modern laboratories and support facilities for basic science researchers. Currently, 8,437 square feet of wet-laboratory space is available for faculty and student research. The center provides space for research targeting health disparities as well as community health initiatives.

MSSU-KCU RESEARCH CONSORTIUM

To serve the research needs of faculty and students on the Joplin campus, KCU established a memorandum of understanding (MOU) with Missouri Southern State University (MSSU), a strong community partnership providing approximately 1,800 sq. ft. of space (with approximately 240 sq. ft of bench space) in the Mills-Anderson Justice Center on the MSSU- campus. This collaborative partnership is known as the MSSU-KCU Research Consortium Biomedical Research Laboratory (MKRC-BMRL).

CENTER FOR POPULATION HEALTH AND EQUITY

KCU established the Center for Population Health and Equity (CPHE) in 2023 with the primary goal of improving the health of people in vulnerable, underserved, urban, and rural communities by implementing new research, community outreach, academics, and service activities for faculty and

students. Currently under construction, a CPHE facility on each campus will include laboratory space, technology classrooms, office and support space, and academic and community outreach activities. In 2024, KCU is renovating the DCR building on the Kansas City campus and constructing a new building on the Joplin campus. The CPHE will allow faculty and students to research and identify social and structural determinants of health that impact people's ability to thrive and maintain optimal health and strategies to improve health outcomes.

CENTER FOR MEDICAL EDUCATION AND INNOVATION

The Center for Medical Education and Innovation (CMEI) is a 54,000 square-foot one-of-a-kind teaching and research facility with opportunities for use of virtual reality (VR) and augmented reality (AR) technology. The CMEI houses ICU simulation sites, medical robots, 22 standardized patient rooms, and a 70-bay lab for physical diagnosis and osteopathic manipulative medicine (OMM). Ongoing research in this space includes observation and outcomes of student interaction with standardized patients and engagement with virtual reality.

KESSELHEIM CENTER FOR CLINICAL COMPETENCY

This a 6,000-square foot facility, provides two Health Services Psychology research labs, the KCU Baby Development lab and the Affective, Behavior, Learning and Embodiment (ABLE) lab.

D'ANGELO LIBRARY

On the Kansas City campus, D'Angelo Library is fully staffed and available to provide research assistance to all members of the KCU community. A staff librarian is also present on the Joplin campus to assist students and faculty in their research endeavors. KCU librarians may assist by providing literature searches in MEDLINE (PubMed), MD Consult, OVID, EBM Reviews (OVID), Science Direct, OSTMed.DR, Natural Standard, ERIC, Google Scholar, EBSCO, and Gale databases. Other databases are also available for information requests and include: Access Medicine, Access Pediatrics, Access Surgery, CDC, USA.gov, Clinical Pharmacology, John Hopkins ABX Guide, Journal Citation Reports, Medical Letter, First Consult, Up-to-date, MedlinePlus, New Bank, Springer Images, and Ulrich's Periodical Index. Research-related services include one-on-one study-based assistance, answers to reference questions, literature search requests, help locating specific materials, classes/tutorials on using research databases or other library resources.

COMMUNITY RESEARCH OPPORTUNITIES FOR FACULTY AND STUDENTS

Collaborative research includes established relationships with the following community partners:

BIONEXUS KC

For over 20 years, BioNexus KC has advanced the region's strengths in digital health, cancer research, health equity, informatics, and rare diseases.

FRONTIERS CLINICAL AND TRANSLATIONAL SCIENCE INSTITUTE

Frontiers Clinical and Translational Science Institute is funded by the NIH National Center for Advancing Translational Sciences (NCATS) through a clinical and translational science award (CTSA). Their overall goal is to accelerate improvements in health and health care for the region and nation by training a diverse workforce, listening, learning and partnering with all stakeholders and surmounting barriers to innovation, and achieving equity across the lifespan for the underserved and excluded populations including those in the rural communities.



 **Kansas City University**
COLLEGE OF OSTEOPATHIC MEDICINE